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PREFACE

"Economics seems to apply to every nook and cranny of human experience" (*Robert A. Mundell*). "Some study of economics is at once a practical necessity and a moral obligation, for economic questions touch the daily lives of all." (*Henry Clay*). Thus, *Encyclopaedic Dictionary of Economics* which is the first of its kind in the entire literature of economics, has been prepared so as to be useful not only to under-graduate and post-graduate students of economics, teachers of economics, research scholars and economic writers, but also to economic administrators, policy makers, businessmen, statesmen and the enlightened public whose opinions influence the formulation of national and international economic policies.

The *Dictionary* covers every important economic pronouncements said from the pre-Aristotlean days to the present (1984 Economics Nobel Prize winner Dr. Richard Stone). In other words it encompasses all the Schools of economic thought *viz.*, ancient economic thought, mercantilism, physiocracy, classical school. neo-classical school, modern school and neo-modern school. The *Dictionary* for the first time also covers ancient, medieval and modern *Indian* economic thought, and economy.

"Economics is an unfinished science" (*F. Zuethen*). It is growing at a staggering rate both vertically and horizontally. The present work, accordingly, covers with its 3258 entries, the following branches of economics :

(1) History of economic thought. (2) Theory of value, (3) Monetary economics, (4) Public finance, (5) International economics, (6) Business cycles, (7) Mathematical economics, (8) Statistics, (9) Econometrics, (10) Welfare economics, (11) Economic history, (12) Agricultural economics, (13) Industrial economics, (14) Managerial economics, (15) Economics of development. (16) Economics of planning, (17) Economics of transport. (18) Economics of education, (19) Keynesian economics, (20) Marxian economics. (21) Rural economics. (22) Economics of war, (23) Economics of co-operation, (24) Research methodology, (25) Economic sociology, (26) Economic geography, (27) Economic botany, (28) Commerce, (29) Economics of love, and (30) Economics of labour.

The Dictionary includes definitions of economic terms, statements of economic laws, theories and principles with historical notes wherever necessary, descriptions of economic and financial institutions and organizations, biographical sketches of eminent economists—dead and living, foreign and Indian—with a greater accent on their important contributions

to the science of economics and finally summaries of the reports of important economic committees and commissions. I have also added an appendix containing some interesting and useful economic quotations.

"The beginner (of economics) must be warned that he will have to master a technical vocabulary. Instead of coining new words however or using Latin and Greek terms as many of other sciences do, economics has created its own vocabulary by taking words in ordinary everyday use assigning special meanings to them. Unless a student is careful, this will be a source of confusion." (*A.L. Meyers*). Accordingly this *Dictionary* will enable the beginners to acquire exact technical meaning of the economic terms.

Then there is another and very serious problem which is peculier to economics: "More unfortunate from the students' point of view is the fact that not all economists always mean exactly the same thing when they use the same term." (*A.L. Meyers*). "In Economics the same word (concept) is variously defined. We do not have the principle of linguistic monogamy—one meaning wedded to one word. We (thus) find in Economics linguistic polygamy or Hollywood marriage." (*Kenneth E. Boulding*). Further, of all the social sciences, economics is the most controversial. In this connection F.Y. Edgeworth remarks, "We hold that for the mastery of a speculative and controversial science (which economics is) a certain multiplication of authorities is desirable. It is a false tendency on the part of the teachers to inculcate and the pupils to learn by rote the very phrases and metaphors of a favourite author." In view of the aforesaid difficulty and in order to get over it, the views of different economists on the same concepts are put together. The cross-study of different authors should present a complete and correct idea.

The question of claiming originality does not arise at all, because A.N. Whitehead has already settled the issue for good when he said: "Everything of importance has been said before by somebody who did not discover it."

G.L.S. Shackle in his *Economics for Pleasure* observes: "Hatred ridicule and contempt......are the lot of economist, for he is the exponent of dismal science." However, while presenting the life sketches of economists, I have eschewed the above 'lot of economist' and have tried to concentrate on the positive contribution of these economists without myself being either idolatrous or hyper-critical.

Against each entry in the bracket I have mentioned the context, that is the branch of economics, in which the entry is used, so as to avoid the possible confusion in the mind of the reader.

I have spent over 20 years since I joined Yeshwant Mahavidyalaya Nanded (Maharashtra) as lecturer in economics in 1963, in reading hundreds of economic books and journals, collecting material, processing and co-ordinating it and producing it in the present form. I earnestly hope that my pains-taking efforts will be blessed with a reward that I am placing

in the hands of the readers. I alone am responsible for any shortcomings or inaccuracies in the book and the suggestions for correction or improvement will be gratefully accepted.

I express my thanks to my first Principal G.R. Mhaisekar (later the Rajya Sabha Member) and my students for having induced me to compile this *Dictionary*. My thanks are also due to my colleagues J.P. Karva and P.G. Nayak for having assisted me in preparing the book and Mr. N.S. Kotur and P. Goudellar for having typed the manuscript.

I very humbly acknowledge my deep indebtedness to all the authors and their esteemed publishers for my having consulted their books in preparing the present *Dictionary*.

Lastly I would be failing in my duty if I do not express my thanks to my wife and children for their 'waiting' and 'abstinence'. The author is profoundly beholden to Mr. K.M. Mittal for having evinced keen interest in the book and for executing the work superbly.

Dharwar

N.B. GHODKE

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246. Richard G. Lipsey
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440. Barbara Wootton
441. P.G. Wright

442. Dale Yoder
443. *Yojana*
444. Arthur Young

445. F. Zweig

MACHINE-HOUR (*Industrial economics)

The running of a machine or piece of plant for one hour.

International Labour Organisation

MACHLUP, FRITZ (*History of economic thought)

A noted contemporary American (Princeton University) theoretical economist.

Professor Machlup who has the credit of clarifying the results of Keynesian economics as contained in *General Theory* has rendered significant service by bringing together officials, academicians and bankers in a steady discussions of world monetary problems.

Machlup's important works are: (1) *International Trade and the National Income Multiplier* (1943) and (2) *Essays in Economic Semantics* (1963) which contains his papers and articles published in leading journals.

Compiler

MACMILLAN COMMITTEE ON FINANCE AND INDUSTRY (*Monetary economics)

Predecessor Committee (England) to Radcliffe Committee, appointed in 1929. Its report was published in 1931. Lord Macmillan was chairman while J.M. Keynes was a member.

It deprecated the practice of "window dressing" by the English commercial banks and recommended the establishment of some institutions to provide medium term finance to industry. It okayed England's return to gold standard in 1925 at the pre-1914 parity.

It is significant that both of its recommendations mentioned above were implemented with the window-dressing ending in 1946 and the establishment of the Finance Corporation for Industry and the Commercial Finance Corporations in 1945.

Compiler

MACRO DYNAMICS (*Theory of value)

A type of macro-economics. It explains the working of the economy as a progressive whole. It describes the continuous changes of aggregates and the macro variables and also explains the process of adjustments.

D.H. Robertson, P.A. Samuelson, R.F. Harrod, M. Kalecki, R. Frisch, J. Tinbergen and J.R. Hicks have mainly contributed to the development of macro dynamics.

Vaish and Sundharam

MACRO-ECONOMIC PARADOXES (*Theory of value)

The propositions which are true when applied to a single individual but which are untrue when applied to the economic system as a whole.

Kenneth E. Boulding

The macro-economic paradoxes justify a separate study of macro-economics. These paradoxes are as follows:

(i) The proposition that though an individual can accumulate money stock (cash balances) by the process of hoarding (income exceeding his expenditures), a community can increase its total money stocks only by deficit financing and cannot increase its money stock by the process of individual hoarding.

Professor J.K. Mehta of India challenges the above proposition as given by professor Boulding and writes that "it would be a paradox if we could say that though *all* individuals increase their hoarding, the community cannot".

(ii) The proposition that an individual saves by consuming less than what he produces. He betters his economic position by saving. On the other hand the society becomes better off by the sum of decisions to accumulate assets, i.e. to invest.

Professor Mehta concedes the truth in this proposition, but wonders whether there is any real difference between individual savings and the communal savings.

(iii) The distribution of national income between profits and wages or rather between non-labour income and labour income is determined not directly by the entrepreneurial productive efficiency or by the wage bargain but by a configuration of factors such as managerial decisions to invest, i.e. accumulation of real assets and the complex of decisions of the entire community about preferred liquidity.

Boulding concludes, "It is these paradoxes, more than any other factor, which justify the separate study of the system as a whole, not merely as an inventory or list of particular items, but as a complex of aggregates.

Compiler

MACRO-ECONOMICS (*Theory of value)

That part of economics which studies the overall averages, an aggregate of the systems is often called macro-economics.

Macro-economics deals not with individual quantities as such but with aggregates of these quantities; not with individual incomes but with the national income; not with individual prices but with the price levels; not with individual inputs but with the national outputs.

Kenneth E. Boulding

Economics which deals with aggregates such as total output, total expenditure on consumer goods and an investment, the average level of prices, wages and interest rates, and how these aggregates affect one another and act on the economic system as a whole.

Frederic Benham

That phase of economic analysis which is concerned with aggregates. *Macro* comes from Greek word *makros* meaning large. Macro economics is macroscopic. It sees the economy as a whole and is concerned with factors hat govern its aggregate size.

Raymond Bye

Aggregate economic analysis. It is also called Income and Employment theory.

Sam Rosen

Economics of aggregates like total national income, total production, total consumption, total savings and total investment.

A.L. Meyers

A new type of economics often referred to as Keynesian economics after its famous exponent J.M. Keynes (1883-1946).

It is the economics of the large or aggregate in contradistinction to micro-economics—the economics of the small or particle.

Anatol Murad

Lord Keynes of England, Leon Walras of France, and Fisher of America are some of the modernists who have contributed to the development of macro-economics. It is also called Aggregative economics.

A.K. Cairncross

The terms macro-economics and micro-economics were coined by Nobel Laureate the late professor Ragnar Frisch of Oslo University (Norway). Maurice Dobb of England calls them macroscopic economics and microscopic economics.

Compiler

Though the word itself was originated by the (late) Ragnar Frisch in 1933, the method of approach is by no means new—the eighteenth century Physiocrats, for example, adopted it when they divided society into three 'classes' to show the circulation of wealth; nevertheless the most important developments in macro-economic analysis have occurred only within the last few decades, the point of development being the appearance of Keynes's *General Theory* in 1936.

F.S. Brooman

MACRO-ECONOMICS, PROPER (*Theory of value)

A particular method for the study of general economics through the use of models involving large aggregates and averages of economic quantities.

K.E. Boulding

MACRO-ECONOMY (*Theory of value)

One of which the environment is devoid of human influence, i.e., of the influence of other human, economic units.

J.K. Mehta

MACRO-STATICS (*Theory of value)

A type of macro-economics. It explains certain aggregative relations which obtain in the stationary position or equilibrium without any attempt to show how the economy reached there or without reference to the process of adjustment implicit in that position of equilibrium.

Vaish and Sundharam

MADAN, BALKRISHNA K. (b. 1911) (*History of economic thought)

India's eminent economist and banker. He was the President of the Indian Economic Association in 1961.

Educated at the University of Punjab, Lahore, Dr. Madan started his career as lecturer in economics in that University (1936-37). Since then he has held numerous high-public posts. He was Deputy Governor of the Reserve Bank of India during 1966-67. He was twice (1946-50) India's Executive Director at the International Monetary Fund. He was a member of the first Indian Finance Commission and the Indian Taxation Enquiry Committee.

Dr. Madan is author of a number of books and articles. *India's Imperial Preference—A Study in Commercial Policy* (1939) and *Aspects of Economic Development and Policy* (1966) (which is a collection of papers mostly on problems of development policy) are some of his important contributions.

Compiler

MAHALANOBIS, PRASANTA CHANDRA (1893-1972) (*History of economic thought)

India's leading statistical economist.

Professor P.C. Mahalanobis who is considered to be the leader of statistical movement in India, was born in West Bengal on 29th June 1893. He died at the age of 79 at Calcutta on June 28, 1972.

Mahalanobis—the world-renowned physicist-turned-statistician-turned-meteorologist-turned-econometrician was awarded in 1968 Padma Vibhushan, India's second highest national honour, in recognition of his singular service to the cause of Indian science.

Mahalanobis whom Dr. C.D. Deshmukh described as "eminent scholar and scientist, restless visionary and planner", founded in 1931 the famous Indian Statistical Institute (ISI) at Calcutta and became its founder-director. The Institute conducts high level research in statistics.

In 1933, he started *Sankhya*, the journal of the ISI.

Professor Mahalanobis also founded the International Statistical Educational Centre at Calcutta in 1950 under the auspices of the UNESCO and the Government of India.

Mahalanobis prepared a Draft Plan frame of India's Second Plan (1956-61). It was adopted by the Planning Commission. Under his technical guidance, the Government of India established a Central Statistical Unit in 1949 and the National Sample Survey in 1950.

Mahalanobis formulated D^2 Statistics which has come to be called Mahalanobis distance. It has become a valuable tool in taxonomy, economics and geology. He constructed a four-sector econometric model as a basis for India's Second Five Year Plan.

Mahalanobis was interested in operational research and not mere theoretical research.

After taking a B. Sc. (Hons.) degree in India, Mahalanobis joined King's College in 1913. There he took Part-I of Mathematical Tripos in 1914 and Part-II of the Physics Tripos with a first class in 1915, when he became Professor of Physics at the Presidency College, Calcutta. He headed the Department between 1922 and 1942. He also served as the Principal of the College from 1945 to 1948. Between 1922 and 1926 he had worked as Meteorologist at Calcutta. He also served as the head of the post-graduate department of statistics at Calcutta University (1941-46); Statistical Adviser to the Government of Bengal (1945-48) and Government of India; and General Secretary of Rabindranath Tagore's Vishwa Bharati (1921-31). He was a Fellow of many Societies such as Royal Statistical Society (London) and Econometric Society. He was selected on several U.N. Delegations.

In addition to over 200 scientific papers, Mahalanobis wrote a significant book *The Approach to Operational Research to Planning in India.*

Compiler

MAHALWARI SYSTEM (*Agricultural economics)

A system of land tenure that prevailed in India. *Mahal* means village land. This system puts the responsibility for the payment of the land revenue not only on the individual co-sharers of the village land but legally speaking jointly on the village community.

Alak Ghosh

The system of land tenure in India in which land is held jointly by cosharing bodies of villagers or village communities.

Das and Chatterji

MAJOR CYCLE (*Business cycles)

The fluctuation of business activity occurring between successive "crises".

J.A. Estey

Severe economic fluctuations ranging in length from 6 to 13 years are called major business cycles.

Raymond Bye

MAJOR IRRIGATION SCHEME (*Agricultural economics)

Irrigation project costing more than Rs. 5 crores.

P.C. Jain

MAJUMDAR, TAPAS (*History of economic thought)

A noted economic theoretician of India (West Bengal). His greatest and much quoted (both in India and abroad) book is *The Measurement of Utility* (1958). This controversial and lively monograph surveys the concepts of utility that have appeared in economic literature: in his own terminology, (1) Introspective cardinalism—Jevons and Marshall; (2) Introspective ordinalism Hicks and Allen; (3) Behaviourist cardinalism—Neumann and Morgenstern; (4) Behaviourist ordinalism—Samuelson's revealed preference; and (5) Introspective cardinalism revived—Armstrong's marginal preference. Dr. Majumdar opts for the second. He is at present Professor of economics in Jawaharlal Nehru University.

Compiler

MALNUTRITION (*Demography)

The lack or inadequacy of a particular or several essential nutrients, such that if made good, the clinical signs of specific deficiency diseases are eliminated and further with appropriate increase in the intake of nutrients the sub-clinical signs associated with poor health are also removed.

P.V. Sukhatme

MALTHUS, THOMAS ROBERT (1776-1834) (*History of economic thought)

The first Cambridge (England) economist, a front-ranking classical economist of world fame and the founder of demography.

Malthus's greatest book which has raged since its publication world-wide controversy is *Essav on the Principle of Population*. It was first published by him anonymously under the title—*An Essay on the Principle of Population as It Affects the Future Improvement of the Society* (1798). In 1803 he published it under his name—this time a second edition, much modified and amplified with a slightly different title: *An Essay on the Principle of Population or A View of Its Past and Present Effects on Human Happiness.* Sixth and the last edition was published in his own life time

in 1828. It is this book in which he enunciated the famous law of population which since then has came to be called Malthusian theory of population. Through this law he showed the contrast between the frightful rapidity with which population grows when it is allowed to take its own course, and the relative slowness in the growth of the means of subsistence. For the same even Charles Darwin acknowledged his indebtedness to Malthus.

We must not forget his other books although they have been virtually eclipsed by the fame of his above-mentioned works. Some of them are: (1) *The Principles of Political Economy Considered with a View to Their Practical Application* (1820); (2) *A Series of Short Studies Dealing with Corn Laws* (1814-15); (3) *On Rent* (1815); (4) *The Poor Law* (1817); and (5) *Definitious in Political Economy* (1827).

While his *Essay* is a brilliant essay on moral theology on the theme of the long-run equilibrium of human misery, his *Principles* stands out as a work of remarkable insight which anticipated many of the Keynesian principles and yet was largely neglected for over a century. Book I of *Principles* deals with value and distribution theory while Book II is concerned with general overproduction. It is typically Ricardian treatment emphasising perfect measure of value, the theory of differential rent, and the relation between profits and wages sharing a total product-less-rent. He accorded pivotal role to effective demand. He distinguished between Ricardo's "extent of demand" as the quantity actually bought on the market at a given price and "intensity of demand" as the will and power to make a greater sacrifice in order to obtain the object wanted.

Malthus was not much interested in demand theory as such. He rejected Ricardo's measure of value and went back to Smith's standard. He argued that spending on productive labour (i.e. investment) necessarily creates a deficiency of effective demand. Since workers receive less than the value of the product they produce, "no power of consumption on the part of the labouring classes can ever alone furnish an encouragement to the employment of capital". He gave the famous dictum: "Saving, pushed to excess, would destroy the motive to production". This is termed as the saving-defeat-itself fallacy.

Malthus suggested public works schemes to reduce unemployment. However, he felt that this was a palliative. He discussed with Ricardo about the advisability of putting idle labour to work on public projects.

There took place a long debate between Malthus and Ricardo on gluts. (Ricardo firmly believed in Say's identity).

Malthus defined wages as "the remuneration to the labourer for his exertions". He regarded rent as a surplus due to the bounty of nature and in this he differed from Ricardo.

Malthus along with Ricardo is responsible through his pessimistic population theory for the nickname of economics, i.e. the dismal science.

Thomas Robert Malthus was born on February 14, 1776 at Rockery,

county Survey, England. He was the youngest son of Daniel Malthus, a learned man and a friend of great philosophers like Hume and Rousseau. He graduated with honours in theology and philosophy in 1788 from Cambridge University and became in 1805 professor of history and political economy at a college founded by the East India Company at Hailbury. He remained there till his death on December 29, 1834.

Malthus was destined to be a churchman but became a controversial economist whom none can forget. He married at the age of 39 and became father of three sons and a daughter. He travelled through Europe. Just at the age of 32, his *Essay* appeared and made him in no time world famous economist.

Compiler

MALTHUSIAN LEAGUE (*Demography)

The organisation founded by Annie Besant and Charles Bradlaugh to propagate Malthusian ideas on population.

J.L. Hanson

MALTHUSIAN THEORY OF POPULATION (*Demography)

Propounded by T.R. Malthus in 1798 in his famous *An Essay on the Principle of Population,* it states, "By nature human food increases in a slow arithmetical ratio; man himself increases in a quick geometrical ratio unless want and vice stop him. The increase in numbers is necessarily limited by the means of subsistence. Population invariably increases when the means of subsistence increase unless prevented by powerful and obvious checks".

Compiler

A perfectly happy and virtuous community. . . . will double every twenty five years, but there can be no similar increase in their food. The best lands, are taken up first, then the next best, then the inferior, at last the worst; at each stage the amount of food produced is less than before. By nature, human food increases in a slow mathematical ratio; man himself increases in a quick geometrical ratio, unless want and vice stop him.

T.R. Malthus

In 1793, Godwin, a well-known English man published his thesis *Enquiry Concerning Political Justice and Its Influence on Morals and Happiness*, in which he blamed the Government for the unhappiness and misfortune of man.

As a reaction, young T.R. Malthus published in 1798 his *Essay on the Principle of Population.* In this controversial book, he propounded his celebrated theory of population which is in brief: "The power of population is indefinitely greater than the power in the earth to produce subsistence for man. Population when unchecked, increases in a geometrical

ratio. Subsistence only increases in an arithmetical ratio". Hence Malthus suggested preventive measures to check population.

L.H. Haney

It is called simply the law of population.

It states that in a given state of the arts of production, population tends to outrun subsistence.

Raymond Bye

MANAGED CURRENCY STANDARD (*Monetary economics)

Great Britain which had returned to the gold standard in 1925, again abandoned the gold standard and embraced what is sometimes called a managed currency standard or a paper standard.

Under a managed currency standard, the unit of value is not rigidly linked to the value of a specified quantity of gold or silver, but is deliberately managed by the monetary authority.

Following Great Britain's lead, many countries adopted this standard.

Anatol Murad

MANAGED MONEY (*Monetary economics)

Money having no fixed value in terms of an objective standard.

J.M. Keynes

MANAGEMENT (*Industrial economics/Managerial economics)

A special kind of labour. It is often classed as a separate factor of production. It consists largely in making the business decisions.

A.L. Meyers

The organisation and control of human activity directed towards specific ends.

International Labour Organisation

The employer in a corporation.

R.A. Lester

It may be defined as the process by which the execution of a given purpose is put into operation and supervised.

Encyclopaedia of Social Sciences

It may be broadly defined as the art of applying the economic principles that underlie the control of men and materials in the enterprise under consideration.

Srivastav and Nigam

MANAGER (*Agricultural economics)

A person who operates a farm for others.

Foster and Leager

MANAGERIAL ECONOMICS (*Managerial economics)

Price theory in the service of business executives.

D.S. Watson

It consists of the use of economic modes of thought to analyse business situations.

M.P. McNair and R.S. Meriam

The integration of economic theory with business practice for the purpose of facilitating decision-making and forward planning by management.

M.H. Spencer and L. Siegelman

Another name for Business economics.

Compiler

MANAGING AGENT (*Industrial economics)

A firm which is entrusted with the task of managing an industrial concern under an agreement with the parent company, subject to the directions of the Board of Directors.

Das and Chatterji

A person, firm or company entitled to the management of the whole affairs of a company by virtue of an agreement with the company and under the control and direction of the directors except to the extent, if any, otherwise provided for in the agreement and includes any person, firm or company occupying such position by whatever name called.

Companies Act, 1936

MANCHESTER SCHOOL (*History of economic thought)

A name applied by Disraeli to a group of Englishmen who advocated free trade and *laissez-faire*. They forced the British Government to repeal Corn Laws.

After the death of Richard Cobden in 1865, the School melted.

Compiler

MAN-HOUR (*Economics of labour)

Labour of one man for one hour.

International Labour Organisation

MAN IN THE STREET (* General economics)

Ordinary or common man.

D.H. Robertson

MAN POWER (*Industrial economics)

Human resources available to the economy.

A.K. Cairncross

MANHOHAN SINGH, H.K. (*History of economic thought)

A leading Indian economic theorist. He specialises in price theory and international trade among others.

At present Dr. Singh is Professor and Head, Department of Economics, Punjab University, Patiala.

His best known works are:

1. *Demand Theory and Economic Calculation in a Mixed Economy,*
2. *India's Export Trends and the Prospects for Self-sustained Growth* (1969).

In the latter book, which is considered to be the first to comprehensively and critically examine India's export performance during the 1950's, he successfully challenged Surendra J. Patel's views.

Compiler

MANMOHAN SINGH (*History of economic thought)

An outstanding economic administrator of India.

Dr. Manmohan Singh had an enviable academic record. He topped the Punjab University in both his B.A. and M.A., headed the lists again at Cambridge University where he did his Tripos, and finally got a D. Phil. from Oxford University. He has been the chief economic adviser to the Government of India, secretary in the Department of Economic Affairs, member-secretary of the Planning Commission, and member, Economic Advisory Council to the Prime Minister of India (1983).

In September 1982, Dr. Manmohan Singh succeeded Mr. I.G. Patel as the Governor of the Reserve Bank of India and earned the distinction of being the youngest Chief of R.B.I. at the age of 50. (Mr. I.G. Patel became the first Indian Director of the London School of Economics.)

Compiler

MANUFACTURE (*Industrial economics)

The term is now applied to those branches of production where machine and not hand work is most prominent.

Roscher made an attempt to bring it back nearer to its old use by applying the term to domestic as opposed to factory industries, but it is too late to do this now.

Alfred Marshall

MANUFACTURING INDUSTRY (*Industrial economics)

Industry concerned with changing the form of raw materials.

Davar

MARGIN BUYER (*Monetary economics)

One who buys stock in part with borrowed money.

K.E. Boulding

MARGIN BUYING (*Monetary economics)

A contract to deliver money at a future date in return for stock purchased in the present.

K.E. Boulding

MARGIN OF CULTIVATION (*Theory of value)

The stage of utilisation at which a unit of expenditure just pay for itself.

Fairchild, Buck and Slesinger

MARGINAL (*Theory of value)

"A little more or little less of anything."

Mathematically, the term means an infinitesimal increment or decrement.

Raymond Bye

The term came into economics as a loose translation of the German *Grenz* used as a prefix, which literally means boarder or edge.

K.E. Boulding

MARGINAL ANALYSIS (*Theory of value)

Economics written in terms of marginal utility and marginal productivity, and allied concepts such as marginal cost, marginal revenue, marginal efficiency of capital.

According to it, product prices and factor prices are determined by their marginal utility and marginal productivity respectively.

Marginal analysis or marginalism which was no less than a theoretical revolution, was born with the publication of *Theory of Political Economy* (1871) by W.S. Jevons of England, *Principles of Economics* (1871) by Carl Menger of Austria and *Elements d' economie Politique Pure ou theorie de la Richesse Sociale* (1874) by Walras of France.

Compiler

MARGINAL CAPITAL COEFFICIENT (*Economics of development)

Another name for "accelerator".

Compiler

MARGINAL CAPITAL-OUTPUT RATIO (*Economics of development)

The ratio between investment and resulting increase in production.

G.M. Meier and R.E. Baldwin

MARGINAL CONSIDERATION (*Theory of value)

Consideration which concerns a slight increase or diminution of the stock of anything which we possess or are considering.

P.H. Wicksteed

MARGINAL COST (*Theory of value)

The addition to total costs that must be made in order to increase its (firm's) output, per period of time, by one unit.

Frederic Benham

Increase in total cost divided by the increase in total output.

George J. Stigler

The rate at which total cost increases as output increases.

Joan Robinson

The additional cost necessary to produce one more unit of the product.

OR

The addition to total cost made necessary by producing the last additional unit at each output.

A.L. Meyers

The net cost of a marginal addition to output.

A.K. Cairncross

The amount per unit by which a small change in output changes total cost.

Fairchild, Buck and Slesinger

Marginal costs are extra costs occasioned by successive increments in output.

Raymond Bye

MARGINAL DOSE (*Agricultural economics)

The dose which only just remunerates the cultivator.

Alfred Marshall

MARGINAL EFFICIENCY OF CAPITAL (*Keynesian economics)

The expected profitability of new investment is called by the above name by Lord Keynes.

The Marginal efficiency of a capital asset in the highest rate of return over cost expected from producing one more unit (marginal unit) of a particular type of capital asset.

In the language of a man in the street, it may be thought of as the

expected rate of percentage profit per year on real investments of the most efficient type. M.E.C. exceeds the rate of interest.

Dudley Dillard

It is also alternatively called "marginal revenue product of capital".

It refers to the annual amount stated as a percentage of the cost of the capital, that the acquisition of the new capital good is expected to add to the enterprise's net revenues after deduction of all additional costs of operation except the interest costs on the money used.

L.V. Chandler

I define the marginal efficiency of capital as being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital asset during its life just equal to its supply price.

The phrase which Marshall himself uses is "marginal net efficiency" of a factor of production or alternatively, the "marginal utility of capital".

My definition is close to these phrases of Marshall. Similarly my definition is identical to what Irving Fisher calls "Rate of return over cost".

John Maynard Keynes

The expected rate of return over cost from acquiring an additional unit of that good.

Sam Rosen

The ratio of the expected yield of an additional capital asset over a period of years to the supply price of such asset (that is the price that will just induce the producers thereof to supply it). In other words it is the expected earnings of such assets expressed as a percentage return on the supply price.

J.A. Estey

MARGINAL FIRM (*Theory of value)

Firm which is working under the least advantageous conditions or as the least efficient firm.

Briggs and Jordan

A firm which is just capable of earning normal profit.

J.L. Hanson

MARGINAL LAND (*Theory of value)

The poorest land in use. It is also called the *extensive margin of cultivation* because it marks the outer fringe beyond which land is not utilised.

Raymond Bye

It is also called "no-rent land".

Compiler

MARGINAL PHYSICAL PRODUCT (*Theory of value)

Marginal products expressed in physical (and not money) units in tonnes, bushels, yards etc.

Compiler

The Marginal product of a factor is expressed in physical units of produce. So careful economists often speak of marginal physical product rather than plain marginal product.

Paul A. Samuelson

MARGINAL PRODUCT (*Theory of value)

The addition to total product due to the addition of one more unit of the factor of production.

F. Benham

Marginal product of a factor of production is the net amount added to total revenue by the last unit of the factor employed.

A.L. Meyers

The addition to total income of the entrepreneur arising from the employment of an additional unit of that factor.

J.L. Hanson

The additional product resulting from the addition of one more unit of the variable factor.

Murray, Havens, Henderson and Crammer

The change in total product resulting from the use of one more (or one less) unit of the variable factor, the quantities of all other factors being held constant.

Richard Lipsey

Marginal product(ivity) of a factor of production is usually defined as the schedule of the increments in total "product" obtainable through application of additional units of the factor.

Fritz Machlup

MARGINAL PRODUCTIVITY OF CAPITAL (*Theory of value)

The size of the reward paid as interest. This is the traditional view.

Dudley Dillard

MARGINAL PRODUCTIVITY OF LABOUR (*Theory of value)

Amount per labour by which a small change in the number of labourers changes the total product.

Fairchild, Buck and Slesinger

An increase in output caused by an increase of one unit of labour, assuming that the amount of capital is held constant.

Bo Sodersten

MARGINAL PRODUCTIVITY THEORY (*Theory of value)

It explains how the prices of the various factors of production would be determined under conditions of perfect competition and full employment.

F. Benham

J.B. Clark, the American economist, is the founder of this theory.

The theory states that each productive agent will be rewarded in equilibrium according to its marginal productivity as measured by the effect on the total product of the addition or withdrawal of the unit of that agent, the quantity of other agents being held constant.

Mark Blaug

The theory states that under perfect competition in the long run the price of each factor of production will be equal to its net marginal physical product.

The theory is associated with the names of Sir Edward West, David Ricardo, Mountifort Longfield, Jevons, Wicksteed, Marshall, Stuart Wood, J.B. Clark, Walras and Barone. However, this celebrated theory blossomed fully in J.B. Clark's 1899 classic work, *The Distribution of Wealth.*

Originally the theory was developed for explaining the determination of wages only. Alfred Marshall generalised it so as to apply to all the factors of production.

Compiler

MARGINAL PRODUCTIVITY THEORY OF WAGES (*Theory of value)

The theory states that under conditions of perfect competition every worker of the same skill and efficiency in a given category will receive a wage equal to the value of the marginal product of that type of labour.

K.K. Dewett

In looking for early forerunners of the theory, it has became common to point to Mountifort Longfield's *Lectures on Political Economy* delivered in 1833 at Trinity College, Dublin, Ireland.

It may be stated thus: Given that there was a certain quantity of labour seeking employment, the wage at which this labour could secure

employment in a competitive labour market was equal to the addition to total production that resulted from employing the marginal unit of that labour force.

Maurice Dobb

MARGINAL PROPENSITY TO CONSUME (*Keynesian economics)

A refinement of the concept of propensity to consume. It is used to derive the concept of the investment multiplier.

It is the ratio of a small change in consumption to a small change in income. It may be designated by $\frac{\Delta C}{\Delta Y}$ where Δ (delta) stands for small increment.

Dudley Dillard

The proportion spent out of any increase in income.

A.L. Meyers

$C_w = x(Y_w)$ or $C = Wx(Y_w)$

Where C_w=consumption in terms of wage-units.

x=function

y=income in terms of wage-units.

Propensity to consume is the functional relationship, x, between Y_w, a given level of income in terms of wage-units, and C_w, the expenditure on consumption out of that level of income.

J.M. Keynes

MARGINAL PROPENSITY TO SAVE (*Keynesian economics)

One minus the marginal propensity to consume.

Dudley Dillard

MARGINAL PURCHASE (*Theory of value)

That part of the thing which a person is only just induced to purchase.

Alfred Marshall

MARGINAL RATE OF SUBSTITUTION (*Theory of value)

Some economists do not wish to use the phrase 'Marginal utilities' and so they speak of marginal rate of substitution. But it comes to the same.

Frederic Benham

We may define marginal rate of substitution of X for Y as the quantity of Y which would just compensate the consumer for the loss of a marginal unit of X.

J.R. Hicks

The rate at which the consumer trades off Y for X is called the marginal rate of substitution.

D.S. Watson

This concept is a tool of Hicks's indifference curve technique and is paralleled to Marshallian concept of marginal utility.

Compiler

MARGINAL RETURN (*Agricultural economics)

The return no marginal dose.

Alfred Marshall

MARGINAL REVENUE (*Theory of value)

The amount added to total revenue by an increase of one unit in the number of units offered for sale.

Havens, Henderson and Crammer

The amount per unit, by which, under given demand conditions, a small change in volume of sales changes total revenue.

Fairchild, Buck and Slesinger

The addition to total revenue consequent upon the sale of an additional unit.

Briggs and Jordan

The addition to total revenue produced by selling an additional unit of output.

Joan Robinson

The change in total revenue divided by the corresponding change in output.

G.J. Stigler

Marginal revenue at any level of a firm's output is the revenue which would be earned from selling another (marginal) unit of the firm's product. Algebraically it is the addition to total revenue earned by selling n units of product instead of n-1 where n is any given number.

A.W. Stonier and D.C. Hague

The addition to aggregate gross revenue obtained by producing the last commodity unit actually produced.

F. Benham

MARGINAL REVENUE PRODUCT (*Theory of value)

The extra revenue that marginal physical product of a factor actually brings when the extra physical product is sold.

P.A. Samuelson

MARGINAL REVENUE PRODUCTIVITY CURVE (*Theory of value)

The line which shows the addition to total revenue of the firm caused when successive marginal units of a factor are added to the fixed amounts of the other factors which it employes.

A.W. Stonier and D.C. Hague

MARGINAL REVOLUTION (*Theory of value)

The marginal utility theory of value developed by Menger, Jevons and Walras is termed as marginal revolution. Its novelty is that it replaced the labour theory of value.

Compiler

MARGINAL SERVICE OF A COMMODITY (*Theory of value)

The service which we should have to forgo if the supply of the commodity in question were slightly contracted.

P.H. Wicksteed

MARGINAL SIGNIFICANCE (*Theory of value)

Marginal significance (value in exchange) of a unit is represented by the sum of money for which we would consent to have our supply curtailed by one unit.

P.H. Wicksteed

MARGINAL UNIT (*Theory of value)

Any unit of a commodity which a consumer is momentarily considering whether to buy—whether he in fact buys it or not.

A.W. Stonier and D.C. Hague

Any unit in a stock of goods that is used for the purpose of least utility.

A.L. Meyers

MARGINAL UTILITY (*Theory of value)

The addition to total utility which each consumer derives from last unit consumed.

W.J. Fellner

This term is arbitrary. Let us give this quantity a new name—marginal rate of substitution between two commodities.

J.R. Hicks

The utility of the marginal unit—the unit which we think is least worthwhile to consume.

A.K. Cairncross

The extra contentment or satisfaction or utility due to an extra unit flow of consumption of some good.

G.L.S. Shackle

(Grenz-nutz). The term first used by Austrian Wieser. Adopted by Wicksteed. It correspond to Jevon's "final utility".

It refers to the utility of marginal purchase.

Alfred Marshall

The term "marginal utility" is prof. Willian Smart's translation of Friedrich Von Wieser's term "Grenznutzen" which was first used in the latter's *uber den ursprung und die Hauptgesetze des wirtschaftlichen werthes* (on the origin and laws of value) 1848.

H.K. Manmohan Singh

The amount of utility lost when one unit of a quantity of uniform goods is given up (or conversely, the amount of utility gained from the addition of one unit to the quantity.)

Anatol Murad

MARGINAL UTILITY ECONOMICS (*Theory of value)

The founders of modern utility theory are generally recognized to be W.S. Jevons, Karl Menger and Leon Walras. These three men working independently and belonging to different countries came practically at the same time to the same conclusion. Their economics has come to be called marginal utility economics and they constitute the "marginal school".

Compiler

MARGINAL UTILITY OF MONEY (*Theory of value)

The extra utility which a man can obtain by spending in the most sensible possible way the marginal unit of money income.

D.H. Robertson

MARKET (*Theory of value)

It is commonly thought that market is a place where commodities are bought and sold.

F. Benham

Any organisation whereby buyers and sellers of a good are kept in close touch with each other.

A.W. Stonier and D.C. Hague

The machinery by which equilibrium in the marginal significances of exchangeable things is produced, maintained or restored.

P.H. Wicksteed

Economists understand by the term market not any particular market place in which things are bought and sold but the whole of any region in which buyers and sellers are in such free intercourse with one another that the price of the same goods tends to equality easily and quickly.

A. Cournot

Originally a market was a public place in a town where provisions and other objects were exposed for sale; but the word has been generalised so as to mean anybody of persons who are in intimate business relations and carry on extensive transactions in any commodity.

W.S. Jevons

MARKET DEMAND (*Theory of value)

The aggregate of demands of individuals.

A.W. Stonier and D.C. Hague

The summation of the individual demands of the consumers who comprise the market.

Buchanan and Colberg

MARKET DEMAND CURVE (*Theory of value)

The curve showing the relationship between the price of a commodity and the quantity which people in the market are willing to buy at each price in a given period of time.

K.E. Boulding

MARKET DEMAND SCHEDULE (*Theory of value)

The sum of the schedules of the individuals in the market.

G.J. Stigler

Also called industry demand schedule, it means the aggregate of individual demands at each price at any given period of time.

Compiler

MARKET ECONOMY (*Economics of development)

One in which resources are allocated primarily through the working of the price mechanism.

P.W. Bell and M.P. Todaro

In contrast to subsistence type of economy, it is one in which specialized economic units perform different functions, the division of labour is extensive, the extent of market is wide, the amount of capital investment is large and each household exchanges or sells its products.

G.M. Meier and R.E. Baldwin

An economic system in which the means of production (labour, land, capital) are owned privately and individually by the members of the society and the production is carried out at the initiative of private enterprise and is not planned in advance by the government.

George N. Halm

MARKET EQUILIBRIUM (*Theory of value)

A market is in equilibrium, statistically considered, if every person is acting in such a way as to reach the most preferred position, subject to the opportunities open to him.

J.R. Hicks

MARKET IMPERFECTIONS (*Economics of development)

They are one of the characteristics of an underdeveloped economy. They refer to factor immobility, price rigidity, ignorance of market conditions, rigid social structure and lack of specialisation.

G.M. Meier and R.E. Baldwin

MARKET MECHANISM (*Economics of development)

Another name for price mechanism.

Compiler

MARKET PERIOD (*Theory of value)

Very short period.

Compiler

MARKET PRICE (*Theory of value)

The actual price in the short period.

J.L. Hanson

The price that actually exists (with all its erratic irregularities).

Raymond Bye

The price which is present in actual exchange.

K.E. Boulding

The price which is determined by supply and demand.

W.J. Fellner

MARKET RATE (*Monetary economics)

In England it is the current discount rate on three months' bank bills.

Norman Crump

The rate of discount prevailing in the money market among the lending institutions other than the central bank.

K.K. Dewett

MARKET RATE OF INTEREST (*Monetary economics)

Money rate of interest.

Dudley Dillard

MARKET SUPPLY (*Theory of value)

Instantaneous supply with no time given for supply to adjust itself to a change in demand.

K.K. Dewett

Also called instantaneous supply, it is the sale of goods already produced and in existence.

A.L. Meyers

MARKET SUPPLY CURVE (*Theory of value)

The curve showing the relationship between the price of a commodity and the quantity which people are willing to sell.

K.E. Boulding

MARKET SUPPLY SCHEDULE (*Theory of value)

The schedule which shows the relation between the price of the commodity and the total quantity which people are willing to sell at each price.

K.E. Boulding

MARKETING (*Agricultural economics)

The performance of those services that are necessary to get commodities from the place of their production into the hands of the consumer in the form and quantities demanded.

G.W. Forster and M.C. Leager

MARKETING AUDIT (*Research methodology)

An overall evaluation of the marketing policies of the firm with the ultimate objective of formulating an improved marketing policy.

R. Ferber and P.J. Verdoorn

MARSHALL, ALFRED (1842-1924) (*History of economic thought)

One of the three greatest economists of all times, the other two being Adam Smith and Lord Keynes.

Professor Kenneth E. Boulding describes Marshall as the "Father of Modern Anglo-Saxon economics,

Professor Alfred Marshall's contributions are many. His definition of economics as "a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being" gave a new orientation to economics which had fallen into utter disrepute occasioned by severe criticism of classical view of the discipline. It is marshall who gave the name Economics to the discipline.

He defined economics laws or statements of economic tendencies as "those social laws which relate to branches of conduct in which the strength of motives chiefly concerned can be measured by a money price".

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He resolved the methodological controversy by saying, "Induction and deduction are both needed for scientific thought as the left and right foot are both needed for walking".

Marshall attached greater importance to consumption and distinguished human wants as necessaries, comforts and luxuries.

He introduced the concept of consumer's rent or consumer's surplus on which rests the welfare economics. He defined it as "the excess of the price which the consumer would be willing to pay rather than go without the thing, over that which he actually does pay is the measure of this surplus satisfaction."

Dr. Marshall gave the concepts of elasticity of demand and supply. He wrote, "the elasticity (or responsiveness) of demand in a market is great or small according as the amount demanded increases much or little for a given rise in price". He distinguished five degrees of elasticity; absolutely elastic, highly elastic, elastic, less elastic and inelastic.

Marshall added the fourth factor of production namely organisation to the existing three-labour, land and capital.

Professor Marshall stated the law of diminishing returns in the classical sense thus: "An increase in the capital and labour applied in the cultivation of land, causes in general, a less than proportionate increase in the amount of produce raised, unless it happens to coincide with an improvement in the arts of agriculture."

He favoured a big family by observing, "The members of a large family educate one another, they are usually more genial and bright, often more vigorous in every way than the members of a small family".

Introducing a new concept of representative firm, Marshall defined it as "the one which has had a fairly long life, and fair success, which is managed with normal ability, and which has normal access to the economies—external and internal, which belong to that aggregate volume of production, account being taken of the class of goods produced the conditions of marketing them, and the economic environment generally".

He developed the price theory by establishing that the price of a commodity was determined by the interaction between demand and supply.

Marshall, a great compromiser resolved the controversy whether it is demand or supply that plays greater role in the determination of price—by maintaining "we might as reasonably dispute whether it is the upper or the under blade of a pair of scissors that cuts a piece of paper as whether value is governed by utility or cost of production."

He introduced time element in the theory of value by distinguishing between market period, short period and long period. He concluded that in the long run the value of a commodity tended to correspond to its cost of production.

Marshall restated the principle of substitution.

He made the meaning of national income clear by writing "The labour and capital of the country acting on its natural resources, produces annually a certain net aggregate of commodities—material and immaterial, including services of all kinds. The limiting word net is needed to provide for the using up of raw and half-finished commodities and for the wearing out and depreciation of plant which is involved in production: All such waste must of course, be deducted from the gross produce before the true or net income can be found. And net income due on account of foreign investments must be added in. This is the true net annual income or revenue of the country; or the national dividend".

To Marshall, wages were determined by the workers' standard of living; interest was the reward for waiting and profits fluctuated with price variations.

He introduced the concept of quasi-rent—a temporary gain yielded by a scarce factor of production other than land. He distinguished between real and money costs; connected utility and demand, disutility and cost; distinguished between prime and supplementary costs; made economics an engine of human betterment; hated controversy and criticism; coined and developed the phrase, marginal utility of money; and evolved welfare economics.

Born on July 26, 1842, Marshall graduated in mathematics in 1861 from St. John's College (Cambridge University). He taught mathematics for seven years and In 1865 he was the second wrangler in mathematics. He taught mathematics at Cambridge and turned to metaphysics, psychology and finally to economics. In 1867 he started studying economics. In 1876, Marshall married Mary Paley his student and lecturer in Economics.

Marshall was the first Principal of the University College, Bristol from 1877 to 1881. He became Professor of Economics at the Cambridge University in 1885 and resigned from the post in 1908.

From 1891 to 1894, he served on the Royal Commission on Labour.

Marshall's great works are:

1. *Economics of Industry* (1878),
2. *Principles of Economics* (1890),
3. *Industry and Trade* (1919), and
4. *Money, Credit and Commerce* (1923).

The Principles of Economics is one of the most magnificent works written in the history of economic thought. Its glory is non-evanescent.

Lord Keynes is the product of Alfred Marshall.

Compiler

MARSHALL AID (*International economics)

It was inaugurated on June 5, 1947. Mr. George C. Marshall made a speech at Harvard University in which he invited European countries to cooperate for economic recovery and indicated that the U.S. was interested in aiding such a programme. This was the genesis of Marshall Aid otherwise known as the European Recovery Programme.

On April 3, 1948, president Truman signed the Foreign Assistance Act which put Marshall Aid on a definite basis. Fundamentally Marshall Aid was a series of gifts of dollars to Europe.

Norman Crump

MARSHALL, MARY (*History of economic thought)

Wife of Alfred Marshall. Herself was an economist. *Economics of Industry* was written jointly by Alfred Marshall and Mary Marshall.

Compiler

MARSHALL PLAN (*International economics)

(See also *Marshall Aid*)

This was necessitated because the financial assistance from the I.B.R.D. and I.M.F. was not expected to be large in the beginning.

Compiler

An alternative name for OEEC (Organisation for European Economic Co-operation). A number of European countries which did not joint the ECM (European Common Market) organised themselves separately to protect their trade against possible adverse effects arising out of the tariff and quota differentiation which the EEC would bring with it.

The germ of the idea of Marshall plan was contained in the Harvard Address given by the then U.S. Secretary of State on June 5, 1947 by Mr. George C. Marshall. Following his address, a conference of 16 nations was held in Paris in July-September 1947.

B.C. Tandon

Secretary of State (U.S.A.) George C. Marshall after whom the plan was named, suggested that the future assistance of the U.S. "should provide a cure rather than a mere palliative". This plan was to be a concerted endeavour to revive the war-torn economies, promote recovery in production and trade and foster internal stability, participating nations were to initiate individual as well as cooperative programmes and the whole effort was to be largely financed by United States grants and aid.

Sixteen southern and western European countries (i.e. Austria, Belgium, Denmark, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey and the U.K.) favourably responded. The U.S.S.R. not only declined but also opposed.

The essence of the plan was that each recipient government would draw up a reconstruction plan. The U.S. was to furnish the difference between the total amount needed for the restoration of productive capacity and the amounts which the countries would provide for themselves.

From the inception till June 1955 when the operations were almost completed, the U.S. provided about $ 10.3 billion in grants and credits.

Max J. Wasserman and C.W. Hultman

MARX, KARL HEINRICH (1818-83) (*History of economic thought)

"It is a scandal that," writes American Nobel Laureate Professor P.A. Samuelson, "until recently, even majors in economics were taught nothing of Karl Marx except that he was an unsound fellow......such independent and impassioned teachers.........as J.M. Keynes thought Marx sterile and dull. But Marx is neither God nor Devil but a secular scholar whom half the world's population deem important."

Writes Mark Blaug: "Marx the economist is alive and relevant today in a way none of the writers are......He has beed reassessed, revised, refuted, and buried a thousand times; but he refuses to be relegated to intellectual history.........his ideas have become part of the climate of opinion in which we all think, whether we are Marxists or not......blood pressures still go up when Marx is under examination."

Marx is more than an economist, for his sweeping analysis embraces economics, philosophy, political theory, history and sociology. Marx, an economist in classical tradition is a revolutionary, a man of great intellectual power, most influential in the history of mankind, spiritual father of modern communism, progenitor of scientific socialism, author of dialectical materialism and economic interpretation of history and a prophet.

Yet, Marx was a penniless pauper to the last. Once when his wife—Jenny von Westphalen—and children were ill, he wrote to his life-long friend in need indeed, Friederich Engels, "I cannot call in the doctor because I have no money to pay him. For about 8 or 10 days we have all been living on bread and potatoes; and it is now doubtful whether we shall be able to get even that......During the past week or so I have borrowed a few shillings and even pence from workers. It was terrible; but it was absolutely necessary or we should have starved."

Born in a respectable middle class bourgeois Jewish protestant-convert German family on May 5, 1818 at Trier, Karl Marx studied at Berlin and Bonn Universities and got his Ph.D. degree from the University of Jena in 1841. A Hegelian by influence, he could not be appointed at the Bonn University owing to his radicalism. He started editing *Rheinische*

Zeitung which championed the cause of labourers. It was closed. He was exiled to Paris where in 1843 he became the editor of *Deutsch-franzosische Jahrbucr*. He was expelled from Paris. In 1845, he moved to Brussels. There he came in contact with his life-long bosom friend Friederich Engels. In 1848 he left Brussels and returned to Germany. Exiled again, Marx moved to London which remained his home for thirty years till his death on 14th March, 1883.

In 1848, in collaboration with Engels, Marx published a revolutionary pamphlet *Communist Manifesto*. His other major works include: (i) *Introduction to a Critique of Hegel's Philosophy of Right* (1843), (ii) *The Poverty of Philosophy* (1847), (iii) *Critique of Planning* (1859), (iv) *Introduction to the Critique of Political Economy* (1859), and (v) *Das Kapital* (vol. I) (1867). Volumes II and III of the *Das Kapital* were posthumously published by Engels in 1885 and 1894 respectively. The IV and the last volume edited by Karl Kautsky was published in 1904 under the title *Theories of Surplus Value*. The first three volumes of the *Das Kapital* running into 3000 pages contain all the doctrines of Marx.

Marx's contributions are not only legion but also very effective. He expounded the philosophy of history which predicts the inevitable downfall of capitalism and the advent of socialism. He called the classical law of the market, "supply creates its own demand" childish. He founded the association "International" which was the terror of every European Government. In his *Manifesto* Marx brewed modern socialism. He advanced the fundamental doctrines such as theory of surplus labour, and law of automatic appropriation or the law of concentration of capital and exploitation of labour by bourgeoise.

According to him labour is the cause, substance and measure of value. He called wages fund, variable capital. In 1847, he adopted the term "communist" instead of the term "socialist". He wrote, "the history of all hitherto existing society is the history of class struggle."

Marx stood for, among others, abolition of private property, socialisation of means of production and expropriation of capitalists.

Today Marx is not alive, but half the world's people are Marxists. His very name jolts and jerks the businessman. That is Karl Marx.

Compiler

MARXIAN UNEMPLOYMENT (*Marxian economics)

A phrase coined by Mrs. Joan Robinson of England.

Compiler

It is the result of scarcity of capital relative to labour supply.

Mark Blaug

MASS PRODUCTION (*Theory of value)

It results from excessive mechanisation and division of labour. It

refers to a very large scale production of a commodity with the resultant reduction in average cost and price of the commodity.

Compiler

MASS UNEMPLOYMENT (*Economics of development)

Sir William Beveridge is responsible for the phrase.

It refers to unemployment lasting, for a number of men, over many months or several years.

A.C. Pigou

It is also called cyclical unemployment on account of its association with the trade cycle.

J.L. Hanson

The unemployment due to general depressions of trade.

F. Benham

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) (*General economics)

M.I.T., as it is popularly known, situated at Boston (U.S.A.) is the leading technological university of the U.S.

Its department of Economics has produced economic giants such as Franco Modigliani, Robert Solow, Paul Rosenstein Rodan, Walt W. Rostow, C.P. Kindleberger, Jagdish Bhagwati and P.A. Samuelson.

Compiler

MASTER RATE (*Monetary economics)

Sterling links the currencies of sterling area with outside currencies. Sterling is hence called master currency and its rate in terms of outside currencies is termed as master rate.

R.S. Sayers

MATERIAL GOODS (*Theory of value)

As opposed to non-material goods, material goods are economic goods occupying place.

Compiler

Useful material things and rights to hold or use or derive benefits from material things or to receive them at future times.

Alfred Marshall

MATHEMATICAL ECONOMICS (*Mathematical economics)

As contrasted with econometrics, mathematical economics is economic analysis which uses the more powerful forms of mathematical techniques.

Miles Fleming

Mathematics is at best a useful piece of scaffolding, which should be removed in the presentation of final arguments.

Alfred Marshall

Alas, good soul, mathematical economics helps, at last, to a rough understanding of the effects of the interdependence of economic phenomena, while your gabble (institutional and historical studies) shows absolutely nothing.

Vilfredo Pareto

I have put aside questions to which mathematical analysis cannot be applied.

Cournot

MATHEMATICAL SCHOOL (*Mathematical economics)

The School includes all those who employ mathematical method of reasoning in the pure theory of economics. (There is no mathematical School as such in any meaningful sense of the term).

While virtually every modern western economist is a mathematical economist, the famous mathematical economists are: Jevons, Menger, Walras, Marshall, Wicksell, Bohm-Bawerk, J.B. Clark, Pareto, Fisher, Von Thunen, Cournot, Dupuit, Gossen, Edgeworth, Pigou, Bowley, Cassel, Auspitz, F. Jenkin, Lieben, Lord Keynes, Hicks, Stigler, Samuelson, Kantorovich, Koopmans, Frisch, R.G.D. Allen, Neumann, Marshack, Hotelling, Arrow, Solow, Tobin, Wicksteed G. Debreu etc.

The list can be trebled and retrebled in length, going back to the 1838 classic of A.A. Cournot.

While mathematical application has made economics more precise, it has also made the latter more obscure and abstruse.

Compiler

MATHUR, GAUTAM (*History of economic thought)

An eminent Indian theoretical economist.

Dr. Mathur's important works include *Planning for Steady Growth* (1965) and *Disparity Tax in a Composite Economy.*

For some time, he also served as the Vice-Chancellor of Utkal University (Orissa). Earlier he was Professor and Head, Deptt. of Economics, Osmania University.

Compiler

MATRIX (*Mathematical economics)

A system of m n numbers arranged in the form of an ordered set of m rows, each row consisting of an ordered set of n numbers, is called $m \times n$ matrix to be read as 'm by n' matrix.

Matrix is a basis of input-output analysis.

Shanti Narayan

A Matrix is a rectangular array of numbers, usually represented by enclosing the array by brackets. The numbers of rows and columns are called the dimensions or order of a matrix.

Linear Programming makes a wide use of matrix methods.

G.S. Monga

MATURITY (*Monetary economics/Economics of development)

The date on which a bill of exchange becomes payable.

R.S. Sayers

In relation to economic development, the term refers to the third and last stage of economic growth, the first two being (1) establishing preconditions, and (2) take off, according to W.W. Rostow.

P.C. Jain

The stage in which an economy demonstrates the capacity to move beyond the original industries which powered its take-off and to absorb and to apply efficiently over a very wide range of its resources—if not the whole range—the most advanced fruits of (then) modern technology.

This is the stage the economy demonstrates that it has the technological and entrepreneurial skills to produce not everything but anything that it chooses to produce.

W.W. Rostow

In monetary economics, the term means the time at which a loan falls due for repayment.

W.W. Haines

MAXIMA (*Mathematical economics)

The plural form of 'maximum'. (Minima is the plural form of minimum).

Compiler

MAXIMISATION PRINCIPLE (*Theory of value)

The fundamental economic assumption that every person attempts to maximise his satisfaction or gains.

Compiler

MAXIMISING BEHAVIOUR (*Theory of value)

It implies the ability to arrange the set of possible futures in an order of preference.

K.E. Boulding

MAXIMUM (*Theory of value)

The most possible. A situation in which all resources are employed to the greatest possible extent.

W.W. Haines

MAXIMUM FIDUCIARY SYSTEM (*Monetary economics)

A system of note-issue.

This system fixes the maximum limit up to which the central Bank can issue notes without any metallic reserve and that maximum limit is subject to alteration according as the circumstances demand.

This system was in vogue in France before 1928.

In this system, the Central Bank is given discretion of determining the maximum limit.

A.K. Basu

MAXIMUM SATISFACTION (*Theory of value)

Highest level of satisfaction.

I.M.D. Little

McCULLOCH, JOHN RAMSAY (1789-1864) (*History of economic thought)

A great Scottish economist and statistician. According to Mark Blaug, McCulloch is the leading exponent of the wage-fund theory.

Born at Whithorn and educated at the University of Edinburg, McCulloch edited Smith's *Wealth of Nations* and Ricardo's *Principles of Political Economy.* Reposing unquestionable faith in Ricardianism when all others virtually deserted it, he succeeded in keeping the flag of Ricardianism flying.

While defining wages as "a compensation paid to the labourer in return for the exertion of his physical powers, or of his skill or ingenuity", McCulloch held that natural resources would be of no avail without labour. According to him profits were the produce that accrued to the capitalist after the capital spent on payments and outgoings was fully replaced. To him all labour was productive.

His main work, *Principles of Political Economy* (1825) was translated into French, Italian and German languages. His other important books are: (1) *Essays on the Circumstances which Determine the Rate of Wage* (1826), (2) *Literature of Political Economy* (1845), (3) *Early English Tracts on Commerce* (Reprinted in 1952) and (4) *Essay on Wages* (1846).

However, McCulloch is alleged to have been roughly handled by Marx, Böhm-Bawerk and many others.

Compiler

MEADE, JAMES EDWARD (B. 1907) (*History of economic thought)

A world famous British economist. Along with Prof. Bertil Ohlin of Sweden, Prof. Meade won the 1977 Nobel prize for economics.

The Royal Swedish Academy of Science said that it was giving the 700,000 Kronor ($ 145,000) prize to them "for their contribution to the theory of international trade and international capital movements."

Meade, C.B., F.B.A., M.A., was born of Charles Hippisley Meade and Kathleen (ne'e Cottonstapleton) on 23rd June, 1907 at Swanage, Dorset. He married Elizabeth Margeret Wilson in 1933. The Meades have one son and three daughters. Meade was educated at Malvern College and Orien College, Oxford and at Trinity College, Cambridge.

Meade was Fellow and Lecturer in Economics, Hertford College, Oxford, 1930-37; Bursar, 1934-37; Member, Financial Section and Economic Intelligence Service, LN; Editor LN *World Economic Survey*, 1938-40; Member, Economic Section Cabinet Office, 1940-45; Director, 1946-47; Professor of Commerce with special reference to International Trade, London School of Economics, 1947-57; Professor of Political Economy, University of Cambridge, 1957-69; Nuffield Senior Research Fellow, Christ's College, Cambridge, 1969-74; Visiting Professor of Economics and Finance in Australian National University, 1956; President, Section F of British Association for the Advancement of Science, 1957; Chairman, Economic Survey Mission to Mauritius, 1960; President, Royal Economic Society, 1964-66; Chairman, Institute for Fiscal Studies Committee on U.K. Tax Structure, 1975.

Professor Meade has a large number of significant publications to his credit. They are:

1. *Public Works in Their International Aspect* (1933),
2. *The Rate of Interest in a Progressive State* (1933),
3. *Economic Analysis and Policy* (1936),
4. *Consumers' Credits and Unemployment* (1937),
5. *The Economic Basis of a Durable Peace* (1940),
6. *Planning and the Price Mechanism* (1948),
7. *The Theory of International Economic Policy*, Vol. I (1951) Vol. II (1955),
8. *A Geometry of International Trade* (1952),
9. *Problems of Economic Union* (1953),
10. *The Theory of Customs Unions* (1955),
11. *The Control of Inflation* (1958),
12. *A Neo-classical Theory of Economic Growth* (1961),
13. *Efficiency, Equality and the Ownership of Property* (1964),
14. *The Stationary Economy* (1965),
15. *The Growing Economy* (1968),
16. *The Controlled Economy* (1973),
17. *The Theory of Economic Externalities* (1973),
18. *The Intelligent Radical's Guide to Economic Policy* (1975).

In his monograph, *The Balance of Payments* (1951), Prof. Meade made a detailed discussion of autonomous and accommodating items on balance of payments. He believes that there is little difference between the way in which the gold standard and flexible paper rates of exchange operate to adjust balance of payments.

In "Financial Policy and the Balance of Payments" (1948), Prof. Meade discussed with theoretical emphasis, the impact of financial and credit policies upon a nation's international economic policies.

In his *Trade and Welfare* (1955), he presented the fundamental arguments in favour of a free trade policy and a mathematical formulation of the factor-price equalisation theorem.

His *The Theory of International Economic Policy* Vol. I: *The Balance of Payments with a Mathematical Supplement* (1951) is based mainly on the price mechanism and, therefore, assumes high elasticity coefficients. In his *The Theory of International Economic Policy*, Vol. II; *Trade and Welfare with a Mathematical Supplement*, Meade came to the classical conclusion that in principle, free trade was the optimum form of commerce.

Prof. J.E. Meade, made a comprehensive historical survey of the Benelux union in *Negotiations for Benelux: an Annotated Chronicle* 1943-56 "The Building of Benelux 1943-60 and "the Belgium-Luxembourg Economic Union" 1921-39.

Meade is one of the Keynesians who clarified and extended Keynes's critique of the classical theory.

He, like Tibor Scitovsky and A.P. Lerner, refined the Marshall-Edgeworth law of reciprocal demand.

Meade formulated an analysis of the effects of a customs union on consumption in a model where production patterns are assumed to be rigid and only consumption and trade can vary. According to him, the net effect on welfare will depend on the initial tariff structure and the elasticities of demand for the products.

Prof. Meade's writings are highly theoretical and mathematical.

Compiler

MECHANISATION (*Industrial/Agricultural economics)

The use of tools or equipment of any kind to aid human brain and muscle. Thus it includes any change in organisation, operations, methods, machinery, tools and appliances that tends to lessen reliance upon the unaided mental and manual endowment of the worker in doing work.

Srivastava, Nigam, Sahai and Banerjee

MEDIAN (*Statistics)

If the statistician has an array of all the items to be averaged, the middle point (or the nearest to the middle)—that is the central point above which there are as many items as there are below—is called the "median". It is also called "positional average".

Kenneth E. Boulding

That value of the variable for which there are equal numbers of frequencies of greater and smaller values.

B.C. Brookes and W.F.L. Dick

MEDIATION (*Economics of labour)

Conciliation. A form of industrial diplomacy without resort to public pressure. It involves a third party entering the controversy to the parties to settle the issues in disputes themselves through collective bargaining.

R.A. Lester

MEDIEVAL ECONOMIC THOUGHT (*History of economic thought)

Economic ideas of the Schoolmen living in the period of about one thousand years from 476 A.D. to the 15th century. The three greatest scholastics were St. Thomas Aquinas (1225-74), Nicholas Oresme (1320-82) and Richard Baxter (1615-91).

Compiler

MEDIUM IRRIGATION PROJECT (*Agricultural economics)

Project costing between Rs. 10 lakhs and Rs. 5 crores, (at the 1962 prices).

P.C. Jain

MEDIUM-SCALE INDUSTRY (*Industrial economics)

An industrial unit which employs capital between Rs. 5 lakhs and Rs. 2.50 crores.

The Refinance Corporation, India

MEHTA, JAMSHED KAIKHUSROO (1901-1980) (*History of economic thought)

A world-renowned Indian theoretical-cum-mathematical economist. He has the unique achievement of having falsified the assumption of desirability of multiplicity of wants and having introduced an Indian philosophical approach to economic problems and analysis.

Born in December 1901 in Rajnandgaon, Mehta, the fifth child of his parents, who belonged to a middle class family of Bombay, did his B.A. with English, Mathematics and Economics from Muir Central College. While studying for M.A. in Allahabad University, he came under the influence of Prof. H.S. Jevons. He got his M.A. degree in 1925. The Mehtas have three daughters and two sons.

In 1927, for about four months Mehta joined Christ Church College, Kanpur, but he soon joined Allahabad University as a Lecturer in Economics and later as Reader. In 1951 he became Professor and Head of Economics Dept. there. He retired in 1963. Then he was appointed University Grants Commission Professor in the same University. He taught to post graduate students advanced economic theory, public finance and mathematical economics for 20 years. He was the President of the Indian Economic Association in 1968.

Besides being a distinguished econometrician with profound contribution to his discipline, Prof. Mehta was also a homeopathic physician

and philosopher. He was highly spiritual and philosophical. He was one of the staunch Gandhian economists.

Prof. Mehta has written many outstanding books and articles. The most significant books are:

1. *Groundwork of Economics* (1936),
2. *Studies in Advanced Economics* (1948),
3. *Public Finance* (1949),
4. *Lectures on Modern Economic Theory* (1959),
5. *Economic Problems of Modern India* (1962),
6. *A Philosophical Interpretation of Economics* (1962),
7. *Economic of Growth* (1964),
8. *A Guide to Modern Economics* (1970) (with Mahesh Chand),
9. *Economic Development: Principles and Problems* (1971),
10. *Foundation of Economics,*
11. *Principles of Exchange,*
12. *Elements of Economics, Mathematically Interpreted,*
13. *Macroeconomics,*
14. *Rhyme, Rythm and Truth in Economics.*

Prof. Mehta is the first economist to formally propound an economic theory of wantlessness. Though unorthodox, his views are accepted by economists around the world. For example, Mrs. Joan Robinson made a mention about his contribution in her *Economics of Imperfect Competition* Prof. Mehta too, like Mrs. Robinson, independently arrived at the concept of marginal revenue. He developed the new concept of elasticity of substitution. He propounded the unconventional theory of wantlessness, the essence of which is that the more a person reduces and simplifies his wants, the more contented he is.

His definitions of concepts and his approaches have been new and precise. He raised many economic questions independently. To him a want exists when the presentation of the object of want generates an agreeable feeling: this plus a desire to procure the object makes up 'demand.' His distinction between "conscious" and "unconscious" wants and analysis thereof led Weekstein to create "consumption Effect" in 1962.

He showed how "the only satisfactory way of conceiving social welfare and consequently of measuring it is to identify it with the welfare of an individual who sets himself the task of measuring it".

Mehta defined market as "a state in which a commodity has a demand at a place where it is offered for sale". He maintained that "we cannot talk of equilibrium without referring our case to a period of time".

To Prof. Mehta, profit is the remuneration of only uncertainty bearing, and cycles are endogamous phenomena. He threw light on the problem of long-period cost curves—their shapes, and the distinction

between *ex-ante* and *ex-post* cost-curves. He defined representative firm as "that which shows the same tendency to expand or contract as the industry without limiting the expansion or contraction to changes from within the industry".

He rendered the treatment of imperfect competition more enlightening. He showed that in a riskless economy without land as a separate entity, no factor remuneration can exceed average cost, and that selling price must always equal average cost of production.

Prof. Mehta distinguished profit "as the remuneration for risk-taking from the unexpected surplus".

According to him an underdeveloped economy is one having an increasing stock of capital good. Poverty is not the cause of poverty. To develop, an economy must bring about capital-deepening or capital widening. Mehta says that development is determined by knowledge, optimum allocation, institutions, money and willinguess to grow sacrifice and act.

There is in fact, very little which Professor Mehta has left untouched in the vast literature he has contributed to economics in India.

The criticisms that Mehta writes philosophy in the name of economics and that his assumptions are unrealistic and useless cut no glass.

Prof. Mehta is one economist whose knowledge ranges from a study of the trade cycle to that of utility theory and from the works of Hicks, Samuelson, and other contemporary theorists to the works of their predecessors, Pareto and Marshall. No satisfactory answer has yet been given to his question (raised in 1959); "in one sense or another, the indifference curve method involves measurability of utility. Shall we not say then that this method is Marshall in a Paretian jacket?"

Prof. Mehta provided an alternative interpretation of the Marshallian demand curve which provided a basis for mehta's position that "indifference curve technique is unable to claim any superiority over the demand curve technique". Prof. Mehta's most fundamental but polemical contribution to economics is his definition of economic science. He defined economics "as the science that studies human behaviour as the effort to minimise pain in the long run or, in other words, as an endeavour to gain freedom from wants". That is "economics is a science which studies human behaviour as a means to the end of wantlessness".

According to Mehta, economic generalisations "do not give us a vocational training, they give us general education, liberal education".

Prof. Mehta defines interest as "the earning of capital" which is determined by its marginal productivity. He feels that the classical and the Keynesian theories of the interest are, as a matter of fact, one and the same.

Prof. Mehta died on August 9, 1980 at 11.45 A.M. in Allahabad.

Compiler

MEMBER BANK (*Monetary economics)

In the U.S.A. a commercial bank is called so.

R.S. Sayers

MEMBERS OF THE DISGUISED UNEMPLOYMENT (*Economics of development)

Phrase coined by Mrs. Joan Robinson. It signifies the workers who are transferred or displaced from shrinking industries in depression period, to less productive enterprises like agriculture and other occupations.

Raja J. Chelliah

MEMORANDUM OF ASSOCIATION (*Commerce)

One of the documents of a company to be formed. It contains the title of the company, the nature of the business to be undertaken, the amount of the authorised capital, the address of the registered office, particulars of the shares and a statement that liability of the share-holders is limited.

Compiler

MENGER, CARL (1840-1921) (*History of economic thought)

A celebrated Austrian economist. Carl Menger studied law at Prague and Vienna Universities. He received his Ph.D. from the University of Cracow. After a brief career in the Austrian Civil Service, Menger was appointed as the Professor of Economics at the Vienna University in 1873. He held this position until 1903.

Menger's several books include:

1. *Grundsätze der Volkswirtschaftslehre* (1871),
2. *Investigations into the Methods of Social Sciences, Particularly Political Economy* (1883),
3. *The Errors of Historismus in German Political Economy* (1884),
4. *On the Theory of Capital* (1888).

Carl Menger founded the Austrian School of Economics, which today is one of the world's best centres of advanced studies and research. Menger, a theorist of extraordinary brilliance is one of the triumvirate who developed the revolutionary marginal utility theory in 1871, the other two being W.S. Jevons (1835-1910) (England) and Leon Walras (1834-1910) (France). These are the three prominent men who started the neo-classical movement. The leading novelty in the work of Menger, Jevons and Walras was the replacement of the labour theory of value by the subjective marginal utility theory of value. The significance of the marginal utility theorem was that it provided the archetype of the general problem of allocating given means with maximum effect. Soon marginalism was

extended from household to the firm, from the theory of consumption to that of production. The utility theory supplies most of the excitement of discovery in the seventies and eighties, but it was the introduction of marginal analysis as such that marked the true dividing line between classical theory and modern economics.

Menger classified goods into four orders on the basis of their nearness to consumers. He held that producers' goods derived their importance from consumers' goods.

He termed those goods the demand for which was greater than supply, as economic goods.

Compiler

MEN'S JOBS (*Economics of labour)

Trades which are closed to women.

F. Benham

MERCANTILE CREDIT (*Monetary economics)

A subclass of commercial credit.

The promises to pay of wholesale and retail merchants given in the acquisition of stocks of goods for sale and in meeting current expenses.

R.P. Kent

MERCANTILISM (*History of economic thought)

A school of thought that existed in England between the 16th and the 18th centuries. Comprising practical businessmen, merchants and administrators, it regarded money as the only source of wealth and emphasized the importance of trade and foreign commerce as a means of achieving national economic sovereignty.

The term "mercantilism" received currency at the hands of Adam Smith.

The leading mercantilists are William Petty, Sir Thomas Mun, Charles Davenant, Sir James Steurt, Sir Dudley North, Sir Josiah Child, J.B. Colbert, John Locke, Richard Cantillon and David Hume.

The German mercantilism is called Kameralism (see *Kameralism*).

Compiler

MERCHANT BANKS (*Monetary economics)

Accepting houses. Some of the leading merchant banks are: Barings, Rothchilds, Kleinworts, Erlangers etc.

R.S. Sayers

MERCHANT, K.T. (*History of economic thought)

A well-known early Indian economist. In 1952, with P.A. Wadia, he brought out *The Five-Year Plan Criticism*.

Compiler

MERGER (*Industrial economics)

A business amalgamation where one firm takes over the absolute ownership of the assets of another—the latter losing its separate identity.

A. Beacham

METALLIC MONEY (*Monetary economics)

Money made of metal in contrast to paper money.

Compiler

METAPHYSICS (*General economics)

The science of reality.

A.C. Pigou

METHODOLOGY (*Economics)

The logical process used in discovering or in demonstrating the truth.

Luigi Cossa

MICRO-ECONOMICS (*Economics)

A part of economics. It is a study of particular economic organisms and their interaction, and of particular economic quantities and their determination.

OR

That part of economics that studies particular firms, prices, outputs, income and expenditures.

K.E. Boulding

The term is derived from the Greek word *mikros* meaning small. Micro-economics as contrasted with macro or aggregative economics, studies the individual (particular) units or variables.

Compiler

The analysis of the behaviour of individual consumers and producers.

A.K. Cairncross

MIDDLE AGES (*History of economic thought)

Rather an ill-defined period in the world's history. It may be taken to be the period between 476 A.D. to 1500 A.D.

L.H. Haney

MIDDLEMEN (*Theory of value)

Persons standing between the producer and the consumer.

F. Benham

MILITARY SOCIALISM (*Economics of development)

The socialism of a state in which all institutions are designed for the prosecution of war. It is a state socialism in which the scales of values for determining social status and the income of citizens is based exclusively or preferably on the position held in the fighting forces.

Ludwig Von Mises

MILL, JAMES (1773-1836) (*History of economic thought)

Father of J.S. Mill, philosopher, historian, economist and militant utilitarian of England.

He studied at the University of Edinburg. He edited *Literary Journal* and *St. James Chronicle.*

James Mill was the first to suggest "that all future increments in rent from some current base year could be taxed away without serious harm".

His economics is described as "epitome of orthodox doctrines".

James Mill's important books are:

(i) *Elements of Political Economy* (1821),
(ii) *History of British India* (1817),
(iii) *Analysis of the Phenomena of Human Mind* (1829),
(iv) *Commerce Defended* (1808).

The second book written in 10 volumes is the corner-stone of his reputation. He argued for population control and expounded Benthamite utilitarianism.

Compiler

MILL, JOHN STUART (1806-1873) (*History of economic thought)

One of the greatest intellectuals of the 19th century and a leading Classical economist.

Born in London on 20th May, 1806, Mill, the son of James Mill, learnt Greek and Latin at the age of three and eight respectively. He served the East India Company and was a member of the House of Commons. He died in France in 1873. Mill's great works are:

1. *Logic* (1843),
2. *Examination of Sir William Hamilton's Philosophy* (1865),
3. *Principles of Political Economy with Some of Their Applications to Social Philosophy* (1848).

His other works include :

1. *Essays on Some Unsettled Questions of Political Economy* (1844),
2. *Autobiography* (1873),

3. *On Liberty* (1859),
4. *Considerations on Representative Government* (1861),
5. *Utilitarianism* (1863), and
6. *Auguste Comte and Positivism* (1865).

Of these, his *Principles* was an undisputed Bible of economics till it was eclipsed by Marshall's *Principles* in 1890. The remarkable feature of this book is that it comprehensively covers almost all branches of economics and integrates classicism and anti-classicism. Further, it is the first to combine economic analysis and policy conclusions—a method popular with every economist at present. Moreover, its style is elegant. The book saw seven editions.

In his *Autobiography*, Mill write that the *Principles* "was not a book merely of abstract science, but also of application, and treated political economy not as a thing by itself, but as a fragment of a greater whole—a branch of social philosophy."

Mill defended hedonistic individualism. To him, labour and natural objects were the primary agents of production. He defined productive labour as that "which is employed in creating permanent utilities, whether embodied in human beings, or in any other animate or inanimate objects. 'His notion of unproductive labour is that' which ends in immediate enjoyment, without any increase of accumulated stock of permanent means of enjoyment."

He distinguished between fixed and circulating capital and regarded capital as the product of abstinence from present consumption. He not only supported Malthusian theory of population but went further of recommending the prohibition of the marriage among the poor. He completed the connection between the theory of population and the law of diminishing returns. He formulated the wages-fund theory. "Wages", he wrote, "then depend mainly upon the demand and supply of labour: or as it is often expressed on the proportion between population and capital. By population is meant the number only of the labouring class; or rather of those who work for hire; and by capital only circulating capital and not even the whole of that but the part which is expended in the direct purchase of labour."

Mill supported large scale production, division of labour and Ricardo's theory of rent.

He defined money as "the medium through which the incomes of different members of the community are distributed to them, and the measure by which they estimate their possessions."

He defined the classical theory of international trade. He wrote, "It is not a difference in the absolute cost of production which determines the interchange, but a difference in the comparative cost."

Mill foresaw that the workers would unite forming their association and the capitalists would allow labour participation in management,

He suggested that tax should be levied only once "to meet some national emergency."

To him economics is both an art and a science; both a normative and positive science. Similarly he combined deductive and inductive methods.

Mill was the first Englishman to employ the terms *laissez-faire* and unearned advantage.

Mill was a free trader, liberal and utilitarian.

Compiler

MINHAS, B.S. (*History of economic thought)

An outstanding contemporary Indian theoretical economist. He as a member of the Planning Commission of India, took a critical view of the Fifth Five Year Plan resigned. He felt that the planners had failed in the Fourth Draft Plan to grasp the gravity of poverty in the country. He argued for a higher growth rate and greater foreign aid. He also asked for greater tax efforts from the middle and large farmers, compulsory land holdings and imposition of ceiling on urban property.

Dr. Minhas is of the opinion that self reliance would lead to contingency planning. He is of the view that in the context of abject poverty, self-reliance would cause more problems than it tackles.

His significant book is *An International Comparison of Factor Costs and Factor Use* (1963). In this econometric work, he presented a theoretical analysis of an empirical problem. His another work is *Planning and the Poor*. Dr. Minhas has made an interesting empirical study of the possibility of factor reversals (in international trade). Together with Arrow, Solow and H.B. Chenery, Minhas derived in 1961 a new form of production function *viz.*, constant elasticity of substitution or homohypallagic (homohypallagic is a compound of two Greek words—*Homo* (same) and *hypallage* (substitution). It is considered by Bo Sodersten to be of considerable empirical relevance.

Dr. Minhas was the president of the Indian Society of Agricultural Economics in 1956.

Compiler

MINIMUM DUTIES (*International economics)

As opposed to maximum duties, they are the duties which are usually laid down by Parliament in the tariff law and which fix a lower limit to any concessions which the Administration may make.

Gottfried Von Haberler

MINIMUM WAGE (*Economics of labour)

Wage level below which the workers cannot be paid.

F. Benham

The lowest wage payable to workers legally or otherwise. It is the establishment of a uniform or differentiated "wage floor."

K.L. Kool

MINOR CYCLES (*Business cycles)

Short cycles. In the period 1857-1937 in the U.S. the late Alvin H. Hansen finds 23 minor cycles with an average duration of 3.48 years. From the point of view of the public, minor cycles might well be regarded not as cyclical fluctuations in the time sense but rather, to use the apt phrase of A.B. Adams, as periods of "oscillating equilibrium."

The distinction between major and minor cycles owes to Joseph Kitchin.

J.A. Estey

Less severe or intense business fluctuations.

Raymond Bye

MINOR IRRIGATION PROJECT (*Agricultural economics)

Irrigation scheme costing Rs. 10 lakhs or less (at 1961 prices).

P.C. Jain

MINT PAR OF EXCHANGE (*Monetary economics)

The ratio of the gold content of the two monetary units.

A.L. Meyers

MINT PARITY (*Monetary economics)

The exchange rate between two currencies that is precisely equal to the ratio of their gold contents.

W.W. Haines

MISCELLANEOUS RANDOM FLUCTUATIONS (*Business cycles)

Irregular, uncyclical variations of activity due to the incessant interference of all sorts of causes affecting business. They are "accidental" fluctuations.

J.A. Estey

MISES, LUDWIG EDLER VON (1881-1973) (*History of economic thought)

An internationally renowned Austrian economist.

He has the distinction of having started the fierce controversy on the theory of economic planning in 1920 by arguing that planned economy could never work rationally. To him planned economy is inconceivable. In other words, he is the most relentless advocate of free enterprise,

Born in 1881 at Lemburg and educated at Vienna, Mises served as professor at Vienna University from 1913 to 1934. He was professor of economics at the Graduate Institute of International Studies at Geneva from 1934 to 1940. In 1940 he left for the U.S. and in 1945, he was appointed to a professorial chair at New York University.

Prof. Mise's outstanding works are:

1. *The Theory of Money and Credit* (1912),
2. *Socialism* (1922),
3. *The Free and Prosperous Commonwealth* (1927),
4. *Bureaucracy* (1944),
5. *Omnipotent Government* (1944),
6. *Human Action* (1949),
7. *The Anti-capitalist Mentality* (1956),
8. *Theory and History : An Interpretation of Social and Economic Evaluation* (1957), and
9. *The Ultimate Foundation of Economic Science* (1962).

Professor Mises developed the concepts of praxeology and catallactis. The former implies the science of human conduct while the latter means the science of economic change.

He vehemently opposed mathematical economics by indicting that the "syllogisms of the mathematical method are not only sterile but also divert the mind from the study of real problems, and distort the relation between the various phenomena." He also opposed the index numbers by maintaining that there is nothing like the general price level. He propounded the notion of evenly rotating economy. To him the only fundamental function of money is medium of exchange. He integrated his monetary theory with the general economics.

Mises as an important member of the Austrian school represents extreme invidualism.

MISHAN, E.J. (*History of economic thought) *Compiler*

An American contemporary professional welfare economist. He has developed four producer's surpluses on the same footing as four consumer's surpluses. He is fully versed in the techniques of modern neo-Keynesian analysis. He has worked in the field of cost-benefit analysis and has made a number of important contributions particularly in regard to consumer's surplus, consumer's rent, indifference map etc.

His important works include :

1. *Welfare Economics: Five Introductory Essays* (1964),
2. *A Survey of Economic Theory.*

He has published many articles in prestigious economic journals.

Compiler

MITCHELL, WESLEY CLAIR (1874-1948) (*History of economic thought)

A great American theoretical and quantitative economist. He is one of three founders of institutionalism, the other two being Veblen and Commons. He has immortalized himself through his stimulating contributions to business cycles and statistics. He was the founder of the National Bureau of Economic Research and the chief spokesman of the concept of "measurement without theory."

W.C. Mitchell obtained Ph. D. degree in 1899 and served in the Columbia University between 1913 and 1944. He was a visiting professor at the Universities of Oxford, California and Cornell in 1930, 1934 and 1935 respectively. His outstanding contributions to Economics brought him honorary doctorates of the Universities of Harvard, Columbia, Paris, California, Princeton and Pennsylvania.

Professor Mitchell, the founder of prestigious National Bureau of Economic Research (1920)—an organisation which even to this day has been bringing forth innumerable monographs on the quantitative aspects of economic phenomena—was its Director for sometime. Besides taking active part in the *Social Science Research Council* and the *Bureau of Educational Experiments*, he served on

1. The Immigration Commission;
2. The Bureau of Labour Statistics,
3. The Industries Board,
4. President Hoover's Committee on Social Trends,
5. The National Planning Board,
6. The National Resources Board,
7. The Federal Emergency Administration of Public Works, and
8. The Committee on the Cost of Living.

Mitchell, a proud student of Veblen wrote numerous books of the following are the most outstanding.

1. *History of the Greenbacks* (1903),
2. *Gold Prices and Wages* (1908),
3. *Business Cycles* (1913),

4. *Business Cycle and Unemployment* (1923),
5. *Business Cycles—The Problem and Its Setting* (1927),
6. *Recent Economic Changes* (1929),
7. *The Backward Art of Spending Money* (1933),
8. *Measuring Business Cycles* (1946) (with A.F. Burns),
9. *Economic Research and the Development of Economic Science and Public Policy* (1946),
10. *Lectures : Notes on Types of Economic Theory* (1949), and
11. *What Happens During Business Cycle* (1951).

Mitchell, an original thinker, stressed the quantitative analysis in economic investigations; expanded the scope of economics to explain at once the current working and the cumulative changing of economic processes; founded institutional economics which took the form of collecting statistical data on the notion that these would finally provide explanatory hypotheses; propounded the theory of economic guidance which pointed out that the introduction of corporate enterprise separated ownership and management leading to concentration of power in the hands of a few directors and executives to the detriment of shareholders; suggested that economic welfare did not merely mean abundant supply of goods but also a satisfactory working life full of interesting activities; made it clear that planning was not un-American and it was essential for an orderly economy; developed the self-generation theory according to which each phase of a business cycle would automatically generate the other; defined business cycles as a species of fluctuations in the economic activities of organised communities.

Mitchell's *Business Cycles* is his masterpiece and as opined by A.F. Burns, "No other work between Marshall's *Principles* and Keynes's *General Theory* has had as big an influence on economic thought of the Western World would as this book."

Compiler

MIXED BANKING (*Monetary economics)

A blending of deposit banking with investment banking.

Compiler

MIXED CAPITALISM (*Economics of development)

The present day capitalist order which resembles neither the free exchange economy nor *laissez-faire* system, but is a mixed system.

Compiler

MIXED ECONOMY (*Economics of development)

Alvin H. Hansen calls it "dual economy," while Abba P. Lerner terms it "controlled economy" or "service economy."

It is a mixture, in varying degrees, of socialism and capitalism. India is a mixed economy.

Compiler

An economic system where state enterprises coexist with private enterprises.

Alak Ghosh

The term connotes the coexistence of a number of different forms of economic activity, each with its own objectives, motivation and methods of production.

Planning Commission of India

MIXED FARMING (*Agricultural economics)

Growing together many products.

R. Cohen

MIXED GOLD EXCHANGE STANDARD (*Monetary economics)

An arrangement under which a nation holds some gold and also some claims against foreign money to redeem its own money for international purposes.

L.V. Chandler

MOBILITY (*International economics)

Movements of a factor of production between industries or occupations or places.

Frederic Benham

MOBILITY OF LABOUR (*Industrial economics)

Movement of labour between countries and within the country between occupations, industries and places.

Frederic Benham

MODE (*Statistics)

Mode is the value which occurs most often in the data. It is the value around which there is the greatest degree of concentration.

The mode means 'norm' or 'fashion'. Thus, it is a typical value or measure of central tendency inasmuch as it is the most probable value in a series.

G.S. Monga

MODE OF PRODUCTION (*Industrial economics)

Technique of production.

W. Fellner

The term refers to a particular social arrangement of production in a society which is uniquely characterised by the following components: (i) the organisation of labour in a scheme of division and co-operation, the skills of labour and the status of labour in the social context with respect to degrees of freedom or servitude; (ii) the geographical environment and the knowledge of the use of resources and materials; (iii) technical means and process and the state of science generally.

G.M. Meier and R.E. Baldwin

MODELS OF OLIGOPOLY (*Theory of value)

Models of oligopoly are the theories which discuss the behaviour of oligopoly. In other words they explain how price and output are determined.

The models fall in two groups: (i) classical, and (ii) modern.

The classical models of oligopoly are: (i) Cournot's model, (ii) Bertrand's model and (iii) Edgeworth's model.

The modern solutions of oligopoly are of (i) A.C. Pigou (ii) E.H. Chamberlin, (iii) Paul M. Sweezy, Hall and Hitch.

(i) Cournot's model

It was developed by Augustin Cournot of France in 1838. Though this is a duopoly model, its results can be extended to oligopolistic market situation. According to this solution, the equilibrium price will be closer to the purely competitive price under diminishing cost than under constant cost, and closer under constant cost than under increasing cost, price will be perfectly determinate.

In other words, output would be two thirds of the maximum possible output (i.e. purely competitive output) and price would be two-thirds of the most profitable (i.e. monopoly) price.

(ii) Bertrand's model

According to this solution advanced by Joseph Bertrand of France in 1883 as a substitute for Cournotesque model, the duopoly (or oligopoly) price corresponds to the competitive price and is determinate.

Cournot's model states that the equilibrium output is less than the competitive output and therefore, price is higher than competitive price, wheras Bertrand's model says that output and price are equal to those in purle competition.

(iii) Edgeworth's model

According to this solution propounded by English economist F.Y. Edgeworth in 1897, price will be indeterminate and will be oscillating or vibrating irregularly for an indefinite length of time, between monopoly price and competitive price.

(iv) Pigou's model

According to this solution expounded by English economist A.C. Pigou in 1929, price would be determinate and closer to the competitive level.

(v) Chamberlin's model

According to this model put forth by Edward H. Chamberlin of the U.S. in the thirties, oligopoly is a form of competition; there is no collusion; each firm acts independently recognizing the mutual dependence of all firms in the group; the equilibrium price would be stable and correspond monopoly price.

(vi) Model of Sweezy, Hall and Hitch

The model known as Kinky demand curve theory of oligopoly was advanced in 1939 almost simultaneously and independently by Paul M. Sweezy in America, and by R.L. Hall and C.J. Hitch in England.

According to this ingenious theory, there exists a kink in the demand curve for the product of an oligopolist and this kink explains the observed price rigidities in the oligopolistic industries.

The theory explains not the price determination but why price once determined, remains inflexible.

The important fact about Sweezy's theory is that "if producer A raises his price, his rival producer B will acquire new cnstomers. If on the other hand, A lowers his price, B will lose customers. "This pattern of expected behaviour produces a kink at the existing price in the demand curve for the product of oligopolist.

Sweezy version states that oligopoly price is what it is. It does not say why it is there. The Hall-Hitch version of the kinky demand curve says that the equilibrium will be determined by tangency between average cost curve and the demand curve.

G.J. Stigler of America empirically tests the theory and concludes that "there is no empirical basis for believing that kink exists."

All the aforementioned theories assume profit maximisation by oligopolists.

There are other recent models which explain price and output under oligopoly by assuming non-profit motives. One such a completely novel and highly ingenious general theoretical approach for solution of oligopoly problem is created by John von Neumann and Oskar Morgenstern in 1944. According to this theory, an oligopolist is faced with a problem of choosing a rational course of action keeping in view the possible reactions of his rivals. This theory is called *the theory of games.*

Despite a plethora of rigorous theories, a satisfactory oligopoly solution is not yet available.

Compiler

MODERN CYCLE THEORY (*Business cycles)

This is the synthetic explanation of all the previous theories of trade cycles. Two new elements—multiplier and acceleration—are added to the explanation. Keynesian reasoning predominates in this theory.

Raymond Bye

MODERN THEORY OF INTERNATIONAL TRADE (*International economics)

This is the theory developed by Swedish economist Bertil Ohlin in 1933, by expanding, elaborating and systematising the ideas of Eli Heckscher, put forward in 1919.

According to this theory, international trade arises on account of differences in factor endowments in different countries. It states that: a country will tend to have comparative advantage in those products which use intensively the country's relatively abundant factor of production and, therefore, to import products which use intensively the country's scarce factor. Succinctly put, the theory states that a country exports those commodities which use intensively that factor of production with which the country is relatively abundantly endowed (*See also* "Heckscher-Ohlin theory").

Compiler

MODERN UTILITY THEORY (*Theory of value)

Also known as *Bernoullian utility theory*, after Daniel Bernoulli of Switzerland, it evolves a technique of measuring utility under certain conditions; shows the possibtlity of the increasing marginal utility of money; and creates a logical foundation for making certain kinds of rational decisions.

The others whose names are associated with the theory are John von Neumann, Oskar Morgenstern, Milton Friedman, and L.J. Savage.

Compiler

MODIFIED VERSION OF COMMODITY THEORY OF MONEY (*Monetary economics)

Money is only one of many economic things. Its value, therefore, is primarily determined by exactly the same two factors, as determine the value of any other thing, namely, the conditions of demand for it and the quantity of it available.

D.H. Robertson

MODIGLIANI, FRANCO M. (*History of economic thought)

An internationally reputed Keynesian economist of Massachusetts Institute of Technology, U.S.A.

According to him, "if people were generally to get a prescribed percentage increase in their incomes that was permanent, they would probably add more to their long-run consumption expenditure than would be indicated by budget studies recorded for a single year." He has made a study indicating the overall stability of saving behaviour relative to income over a long period. His finding is that, "aside from short-term cycles, the percentage saved out of permanent income has been remarkably the same over the last century."

Modigliani has contributed his own macro-econometric model of GNP. The research made by him reveals that money does not matter much or at all.

Along with Friedman and J.M. Duesenberry, Modigliani has the credit of having developed the Keynesian consumer theory.

He has advanced a theory of economic growth. He does not consider the constancy of the capital-output ratio a mere coincidence. He explains it in terms of people's psychologieal decisions about wealth, consumption, saving and dissaving. He emphasizes the life-time patterns of saving for old-age retirement.

Compiler

MONETARY ANALYSIS (*Monetary economics)

As opposed to real analysis, it refers to any analysis that introduces the element of money at the outset of the argument and denies that the essential features of economic life can be represented by a barter model.

M. Blaug

MONETARY AUTHORITIES (*Monetary economics)

Central bank of a country.

Compiler

MONETARY ECONOMICS (*Monetary economics)

A branch of economics, that deals with money and banking.

Compiler

MONETARY ECONOMY (*Monetary economics)

Money economy or monetised economy. Opposite of barter economy.

Compiler

MONETARY OVER-INVESTMENT THEORY OF BUSINESS CYCLES (*Business cycles)

A variant of the monetary theory of business cycles, it holds that the banks by offering loans at low interest, when their reserves are large,

encourage business firms to borrow for purposes of investment in durable equipment. Financed by newly created credit, investment runs ahead of voluntary savings.

Raymond Bye

F.A. Von Hayek of Austria is the exponent of the theory.

Compiler

MONETARY POLICY (*Monetary economics)

Banking Policy.

R.S. Sayers

Any operation by the government (or the central bank) which affects the stock of money, its rate of turnover, and/or the volume of close money substitutes (near monies).

Allen, Buchanan and Colberg

The management of the expansion or contraction of the volume of money in circulation for the explicit purpose of attaining one or more objectives, such as, full employment.

R.P. Kent

MONETARY STANDARD (*Monetary economics)

A monetary system built upon a specific standard of value.

R.P. Kent

The principal method of regulating the quantity and the exchange value of standard or definitive money.

George N. Halm

MONETARY THEORIES OF BUSINESS CYCLES (*Business cycles)

These have been espoused by F.A. Von Hayek, R.G. Hawtrey, Irving Fisher and many other prominent economists. The essence of such a theory is that cycles are caused by monetary factors, such as changes in the quantity of media of exchange or in interest rate. There are many variations of this theme.

Anatol Murad

MONETARY THEORY OF BUSINESS CYCLES (*Business cycles)

The theory expounded by R.G. Hawtrey, an English economist, in his *Good and Bad Trade* (1913).

According to it, business cycle is essentially the result of variations in the money supply produced by the banking systems of advanced industrial societies.

The gist of the theory is: Cycles occur due to elastic supply of money; the banks are capable of expanding or contracting the money supply; such expansion or contraction lead to expansion or contraction of industry and account for trade fluctuations it is a natural tendency of banks to bring about changes in the money supply instead of stabilizing the money supply and interest rate.

Compiler

MONETARY THEORY OF INTEREST (*Monetary economics)

Liquidity theory of interest of Lord Keynes.

Compiler

MONETARY UNION (*Monetary economics)

A group of countries that agree either to establish a common currency or to accept each other's currencies at a par with their own in domestic trade.

W.W. Haines

MONETARY UNIT (*Monetary economics)

Money of account. An accounting standard in which the value (price) or all other goods in measured.

W.W. Haines

MONETIZATION OF DEBT (*Monetary economics)

The process by which a borrower gives his promissory note, to a bank in exchange for the bank's promise to honour his cheques, a promise that he can use as money.

W.W. Haines

MONEY (*Monetary economics)

Anything which is widely accepted in payment for goods or in discharge of other kinds of business obligation.

Sir Dennis H.Robertson

Money is what it does.

F.A. Walker

Anything that is generally acceptable as a means of exchange (i.e. as a means of settling debts) and at the same time acts as a measure and a store of value.

Geoffrey Crowther

Cash and bank deposits.

F. Benham

Something which is widely accepted for the settlement of debt.

R.S. Sayers

Vehicle of investment of real capital.

G. Von Haberler

Anything that is commonly accepted as a medium of exchange, measure of value, or standard of deferred payments.

A.L. Meyers

All those things which are (at any time and place) generally current without doubt or special enquiry as a means of purchasing commodities and services and of defraying expenses.

Alfred Marshall

Purchasing power—something which buys things.

G.D.H. Cole

Anything having a customary or conventional use as a medium of exchange or a measure or denominator of value.

Dictionary meaning

Anything that is generally acceptable as a means of payment (medium of exchange) at a given time and place.

W.W. Haines

A deposit in a bank against which cheques may be drawn.

Businessmen's View

Anything which by custom or law, is generally acceptable without question in payment for goods and services or in final settlement of a debt.

A.K. Cairncross

Anything that passes freely from hand to hand in an economic area as a means of payment irrespective of the credit of the person presenting it.

A Common View

That by delivery of which debt contracts and price contracts are discharged and in the shape of which a store of general purchasing power is held.

J.M. Keynes

One thing that possesses general acceptability.

E.R.A. Seligman

Anything that passes freely from hand to hand as medium of exchange and is generally received in final discharge of debts.

Richard Ely

An article that has the function of common measure for the valuation of other goods.

Gustav Cassel

The complex of those objects which in a given economic area and in a given economic system have as their normal purpose the facilitation of economic intercourse (or the transfer of values) between economic individuals.

Karl Helfferich

MONEY AT CALL (*Monetary economics)

Also called money at short notice, the term refers to loans which are recoverable at call or at the expiry of a short notice.

In London it comprises loans to the bill-brokers or discount houses payable at call or seven days' notice sufficiently backed by eligible collateral securities like first class bills.

A.K. Basu

Loans to certain firms in the city i.e., discount houses, loans which are repayable nominally on demand.

R.S. Sayers

MONEY BROKER (*Monetary economics)

A man who puts those banks who have some money to lend out on day-to-day loans in touch with the firms in the money market who need to borrow money overnight (i.e. for one day). He neither lends nor borrows; he is purely an intermediary who is remunerated by a small commission.

Geoffred Crowther

MONEY BURDEN OF TAX (*Public finance)

As opposed to real burden of tax, the term refers to the amount of tax payable by the tax-payer to the Government.

Compiler

MONEY CAPITAL (*Industrial economics)

The money funds available to an individual or firm for use in gaining command over the service of the original means of production.

A.L. Meyers

MONEY COST OF PRODUCTION (*Theory of value)

The money cost of production of a unit of any commodity is the amount of money necessary to induce the factors of production to be developed to this particular task, rather than to seek employment elsewhere. These cost have been very properly called opportunity costs.

A.L. Meyers

MONEY CREATION (*Monetary economics)

The injection of new money into the circuit flow either by banks or by the Government.

W.W. Haines

MONEY DEMAND SCHEDULE FOR LABOUR (*Industrial economics)

A list of demand prices that are offered for hiring various quantities of labour.

A.C. Pigou

MONEY ILLUSION (*Monetary economics)

In monetary economy there is often what is known as a money illusion. That is to say, money is often regarded as having a fixed purchasing power in terms of commodities.

The term "money illusion" is due to Prof. Irving Fisher who explained that there is money illusion, 'a failure to perceive that the dollar or any other unit of money expands and shrinks in value. We simply take it for granted that a dollar"; that all money is stable.

A.W. Stonier and D.C. Hague

Psychological valuation of nominal money without regard to its purchasing power.

K.K. Dewett

MONEY ISSUE (*Monetary economics)

It often stands for an excess of government spending over tax collection combined with the issue of new money.

Abba P. Lerner

MONEY MARKET (*Monetary economics)

Market for short-term loans.

J.L. Hanson

The various arrangements and institutions concerned with the purchase, sale and transfer of short term credit institutions.

W.W. Haines

Collective name given to various firms and institutions that deal in the various grades of near-money.

Geoffrey Crowther

MONEY MARKET ASSETS (*Monetary economics)

Money at call and bills discounted. These are the most liquid earning assets.

R.S. Sayers

MONEY OF ACCOUNT (*Monetary economics)

Unit of account, standard of measuring value.

Frederic Benham

Money in which debts and prices and general purchasing power are expressed.

Lord Keynes

MONEY ON CURRENT ACCOUNT (*Monetary economics)

This is called so in England. In the U.S. it is called "demand deposit".

Compiler

MONEY ON DEPOSIT ACCOUNT (*Monetary economics)

An English name for what is known in the U.S. as "time deposit".

Compiler

MONEY ON THE WING (*Monetary economics)

D.H. Robertson's name for circulating money as opposed to "money sitting" i.e. idle deposits.

Compiler

MONEY, PROPER (*Monetary economics)

The different currency notes and metallic coins through which business transactions are discharged.

Compiler

MONEY RATE OF INTEREST (*Monetary economics)

Actual rate of interest as influenced by the policy of banks and other monetary factors.

G. Von Haberler

MONEY SITTING (*Monetary economics)

D.H. Robertson's nomenclature for idle deposits as contrasted with circulating money.

Compiler

MONEY SUPPLY (*Monetary economics)

The quantity of those things which do the work of money by acting as medium of exchange.

P.E. Taylor

MONOMETALLISM (*Monetary economics)

A monetary system in which the standard or principal coin is made of one metal, gold or silver.

Rajnarain Mathur

MONOPOLIST (*Theory of value)

A single seller of a commodity.

G.J. Stigler

The sole producer of a product which has no closely competing substitutes.

A.W. Stonier and D.C. Hague

A single seller with practically complete monopoly power. He is called a monopolist from the Greek word "*mono*" for 'one' and '*polist*' for seller.

P.A. Samuelson

A sole seller in a commodity.

Frederic Benham

MONOPOLISTIC COMPETITION (*Theory of value)

Also called "group equilibrium", the concept was introduced by E.H. Chamberlin.

It means the large group of firms making very similar products. Here there is keen but not perfect competition between many firms making very similar products (products are not homogeneous as in perfect competition or remote substitutes as in monopoly, but they are differentiated).

A.W. Stonier and D.C. Hague

Competition with differentiated products.

A.L. Meyers

Sometimes called polypoly in imperfect market, it is the jungle lying between pure competition and effective monopoly.

D.H. Robertson

It is sometimes used interchangeably with imperfect competition and sometimes refers to the special case of imperfect competition than stems from differentiated products.

Fairchild, Buck and Slesinger

When many firms are producing heterogeneous products, and the product of each firm is similar to but not identical with the product of other firms in the same industry, the condition is known as monopolistic competition.

Kenneth E. Boulding

Monopolistic competition, a form of imperfect competition, is a market situation in which many firms producing similar products (neither homogeneous nor heterogeneous) compete with another for the sale of their products. It is a blend of monopoly and competition in that each seller is at once a monopolist and competitor.

The concept of monopolistic competition developed by the late Edward Hastings Chamberlin of Harvard University, U.S.A. in 1933, revolutionised the traditional economics by replacing Marshallian theory of value.

Compiler

MONOPOLY (*Theory of value)

A market situation as distinguished from 'pure monopoly' in which one has competition but not very close competition.

A.W. Stonier and D.C. Hague

Strictly speaking, monopoly is the single seller of a product that does not have an infinitely elastic demand.

G.J. Stigler

A situation in which there are no close substitutes for the product of a single firm.

A.L. Meyers

Ordinarily it means control over the supply and therefore over the price.

Edward H. Chamberlin

It exists when there is only one seller of a product for which there is no close substitute.

Havens, Henderson and Crammer

A form of imperfect competition. A firm has a monopoly when no close substitutes for its product are being produced and there are obstacles which prevent this from happening.

Miles Fleming

MONOPOLY AND RESTRICTIVE TRADE PRACTICES COMMISSION (MRTPC) (*Industrial economics)

The Mahalanobis Committee appointed in 1960 said in its report (1964) that "the working of the planned economy has contributed to the growth of big companies in India." The Monopoly Enquiry Commission appointed in 1964 under the Chairmanship of Mr. K.C. Dasgupta made a detailed study of the extent and effect of the concentration of economic power in private hands and the prevalence of monopolistic and restrictive practices in economic activity other than agriculture; found high concentration of economic power; and recommended that a permanent body *viz.*, the Monopolies and Restrictive Trade Practices Commission be set up. The Government accepted the recommendation and passed the MRTP Act in 1969 which, however became effective only from June 1, 1970. In accordance with this the Monopolies and Restrictive Trade Practices Commission was established with a chairman and three members by the Government in August 1970 for avoiding the concentration of economic power, controlling monopolies and prohibiting monopolistic and trade practices.

The first chairman of the MRTPC was Mr. Justice A. Alagiriswamy, a retired judge of the Madras High Court. On his resignation on October 16, 1972, Mr. Justice J.L. Nain, a judge of Bombay High Court became the next chairman on July 23, 1973. On his retirement on August 8, 1976, Mr. Justice S. Rangarajan, a judge of the Delhi High Court was appointed Chairman with effect from February 24, 1978.

Compiler

MONOPOLY PRICE (*Theory of value)

The function of the marginal cost of production and the elasticity of demand.

Joan V. Robinson

MONOPOLY PROFIT (*Theory of value)

The difference between average cost and average revenue, multiplied by output.

Joan V. Robinson

MONOPSONIST (*Theory of value)

It comes from the Greek words. It means 'single buyer'.

P.A. Samuelson

MONOPSONISTIC COMPETITION (*Theory of value)

A situation in which sellers prefer to sell to one buyer rather than another even though all buyers are offering the same price.

A.L. Meyers

MONOPSONY (*Theory of value)

The term is suggested by Mrs. Joan Robinson. A situation in which there is only one buyer (firm on the buyers' side of a market).

A.W. Stonier and D.C. Hague

MONSOONS (*Agricultural economics)

The seasonal winds which change directions twice a year. These winds bring rainfall.

A.B. Das and M.N. Chatterji

MONTH (*Monetary economics)

Calender month.

Compiler

MORAL RESTRAINT (*Demography)

Restraint from marriage which is not followed by irregular gratification.

T.R. Malthus

MORAL SUASION (*Monetary economics)

A method of credit control in which the central bank persuades the member banks to follow policies that it considers appropriate. For example it may get the commercial banks to agree to limit their borrowing from the central bank, to refrain from expanding their loans or even to contract them, or to lend less liberally for some purposes than for others.

L.V. Chandler

Pressure exerted by central bank on the banking system without any attempt to compel compliance.

W.W. Haines

It refers to those cases where the central bank endeavours to achieve its object by making suitable representations to the institutions concerned and relying on its moral influence and power of persuasion.

M.H. dekock

MORGENSTERN, OSKAR (B.1902) (*History of economic thought)

A world-famous economist who along with Hungarian mathematical genius, John Von Neumann (1903-1957), developed in their classical work *The Theory of Games and Economic Behaviour* (1944), the much publicised 'games theory' which offers a novel solution to oligopoly problem and other economic questions involving risk and uncertainty.

The modern utility theory which devises a method of measuring utility is due to these two scientists. (*See also* "games theory").

Compiler

MORTGAGE DEBENTURE (*Monetary economics)

A debenture which is secured on the company's property giving a charge upon the whole or a part of the assets.

A.K. Basu

MOSHAV (*Economics of development)

The more flexible and liberal form of co-operative enterprise in Israel.

Alak Ghosh

MOSHAV OVDIM (*Economics of development)

Workers' settlement in Palestine.

R.D. Bedi

MOSHAV SHITUTI (*Economics of development)

An agricultural settlement, in Palestine, in which members conduct farm and allied operations jointly with pooling of land, equipment etc. while the individual members have separate homes and live separately their own private lives.

Quoted by R.D. Bedi

MOST-FAVOURED NATION-CLAUSE (*International economics)

This means that each state binds itself not to impose high duties on goods imported from the other state than it imposes on similar goods imported from a third country. This means also that if one of the parties to the agreement lowers its duties on the goods imported from any third country its duties on similar goods from the other contracting party are automatically lowered to the same extent.

Briggs and Jordan

It is an instrument employed in efforts to eliminate discrimination in imports and exports. This provision, which figured in the majority of trade agreements in the 19th century for the purpose of preventing discrimination in the field of customs duties, acquired a broader significance in GATT.

MFN may be either conditional or unconditional.

M.A.G. Van Meerhaeghe

MUKERJEE, RADHAKAMAL (1889-1968)(*History of economic thought)

A leading Indian economist. A product of Calcutta University, Dr. Mukerjee was lecturer in Economics in Calcutta University from 1917 to 1921. He served as Professor of Economics in Lucknow University from 1921 to 1951 when he retired. Between 1955 and 1957 he was the Vice-Chancellor of the same University. Besides, he served on committees of ILO and FAO. He was the President of the Indian Economic Association in 1933.

A versatile personality, Prof. Mukerjee was an economist, sociologist, philosopher, psychologist, historian, political scientist, biologist and so on.

His principal works on economics include:

(i) *The Foundations of Indian Economics* (1916),
(ii) *Principles of Comparative Economics* (1923),
(iii) *Groundwork of Economics* (1926),
(iv) *Land Problems of India* (1933),
(v) *Food Planning for 400 Millions* (1938),
(vi) *The Institutional Theory of Economics* (1940),
(vii) *The Political Economy of Population* (1942),
(viii) *The Indian Working Class* (1945),
(ix) *The Economic History of India* (1946), and
(x) *Planning and Countryside* (1946).

Dr. Mukerjee expired on August 24, 1968.

He wrote, "I am convinced that in sound economic development both large and small industries have their proper scope and importance; and one need not exclude the other." To him rural reconstruction offered key to national economic development. He pleaded for economic planning on institutional basis. He advanced ecological theory of population. He is credited with having coined the term "family planning". He also developed the concept of "regional economics".

Compiler

MULTILATERAL TRADE (*International economics)

Freedom of countries to trade with whatever countries they please.

J.L. Hanson

MULTILATERAL TREATY (*International economics)

Sometimes it is known as collective agreement or international convention.

It means commercial treaty between more than two countries.

Gottfried Von Haberler

MULTINATIONAL CORPORATION (*Economics of development)

A corporation (or company) with the headquarters in a developed country and also operating in other countries.

In 1970, there were about 4,000 such corporations in the world. A majority of them are American.

Compiler

MULTIPLE EQUILIBRIUM (*Theory of value)

One of the types of equilibrium, the others being stable and unstable equilibrium, neutral equilibrium, short period and long period equilibrium, static equilibrium, particular equilibrium, unique equilibrium *et al.*

Compiler

Multiple positions of equilibrium exist when several different sets of prices and quantities will meet the equilibrium conditions.

G.J. Stigler

MULTIPLE EXCHANGE RATE (*International economics)

Establishment of more than one exchange rate in relation to the same foreign currency.

L.V. Chandler

MULTIPLICAND (*Keynesian economics)

The multiplies times the new investment.

Dudley Dillard

MULTIPLIER (*Keynesian economics)

It states how many times a change in the amount of investment is magnified by the consequent change in the amount of the national income.

Frederic Benham

The amplified effect of investment on income is called the multiplier doctrine.

It refers to the numerical coefficient showing how great an increase in income results from each increase in such investment spending.

P.A. Samuelson

The late Lord Keynes of England is the author of the doctrine of multiplier which states that any given increase in investment or in government deficit spending will result in an increase in national income as a multiple of the increase in investment or deficit spending.

A.L. Meyers

The number by which we must multiply the increased investment to obtain the resulting increase in income.

A.P. Lerner

The numerical relationship between a given increment in investment and the increase in national money income that results from it.

The mathematical formula for computing the multiplier is:

$K = \frac{1}{1-MPC}$, where K is the multiplier and MPC is the marginal propensity to consume.

Raymond Bye

A significant contribution of Lord Keynes and R.F. Kahn of England.

There are two main types of multiplier: (1) investment (income) multiplier, and (ii) employment multiplier. Kahn's employment multiplier expresses the relationship between increment in primary employment and the resultant total employment.

Kahn first introduced this doctrine in his 1931 article "The Relation of Home Investment to Unemployment."

Keynes's investment multiplier expresses the relationship between increment in investment and the resultant increment in national income.

We have different extensions of multiplier such as foreign trade multiplier, price multiplier, consumption multiplier, tax multiplier, balanced budget multiplier and so on.

Compiler

MULTIPLIER EFFECT (*Keynesian economics)

An original excess of investment over savings may over a longer time increase money income by several times the primary excess, just as an original deficiency of investment relative to savings may during such an interval decrease money income by a multiple of the primary deficiency. This is what is called the "Multiplier Effect", and its magnitude relative to the original discrepancy is called the "Multiplier".

L.V. Chandler

MULTIPRODUCT FIRM (*Theory of value)

A firm producing more than one product.

Compiler

MUN, THOMAS (1571-1641) (*History of economic thought)

A British Mercantilist. His important works are: (1) *A Discourse of Trade from England into the East Indies* (1621), (ii) *England's Treasure by Foreign Trade* (1964).

He stood for commercial capitalism by assigning an exalted place to the merchant.

Compiler

MURANJAN, S.K. (*History of economic thought)

An eminent Indian economist specialising in banking. Dr. Muranjan was the President of the Indian Economic Association in 1956.

Compiler

MUTUAL BANK (*Monetary economics)

It is also called Trustees' savings bank. In this, the depositors themselves are the owners of the bank. They have no stock-holders and as such the working capital of the bank is derived from the deposits from the public.

A.K. Basu

MYRDAL, GUNNAR (b. 1898) (*History of economic thought)

A multi-dimensional economist, social reformer, diplomat and educator of Sweden.

Along with Austrian Professor F.A. Von Hayek, Gunnar (Karl) Myrdal won the 1974 Nobel Prize in Economics for his multi-disciplinary approach that led to "penetrating analysis of the inter-dependence of economic and institutional phenomena."

The recipient of more than thirty honorary doctorates beginning with Harvard University in 1938, Myrdal is the relentless champion of the Third World.

Myrdal was born on December 6, 1898 in Gustafs Parish, a tiny village in Central Swedens' Coperberg region. He graduated from the Law School of Stockholm University in 1923 and began practising law. On October 8,1894, he married Alva Reimer who later became in her own right the world-famous sociologist, Swedish Ambassador to India, and Sweden's Minister for Disarmament and Church. The Myrdals have two daughters, Sissela and Kaj, and a son, Jan.

Myrdal was not satisfied with his four years' practice at the Bar. He returned to Stockholm University to prosecute his studies and received *Juris doctor* in Economics in 1927 and was appointed docent in political economy. From 1925 to 1929, he studied in Germany and U.K. followed by his first-ever trip to the U.S. in 1929 as a Rockfeller fellow. During this period, he published his first book. Returning to Europe, he first served as Associate Professor in the Post-Graduate Institute of International Studies, Geneva and then was appointed to the Lars Hierta Chair of Political Economy and Public Finance at the University of Stockholm as the successor of his former Professor Gustav Cassel.

In 1934, Myrdal was elected to the Senate as Member of the Social Democratic Party. In 1938, the Carnegie Corporation commissioned Myrdal to direct a study of the American Negro problem. The results of the study were published in his popular and provocative book *An American Dilemma : The Negro Problem and Modern Democracy* (1944).

Myrdal returned to Sweden in 1942 and was re-elected to the Swedish Senate. He served as a Member of the Board of the Bank of Sweden and Chairman of the Post-war Planning Commission.

In 1945, Myrdal was made Sweden's Commerce Minister. He resigned the post in 1947 to become Executive Secretary of the U.N. Economic Commission for Europe. In 1957 he completed this work and left the post

to direct a comprehensive study of economic trends and policies in South Asian countries, for the Twentieth Century Funds.

In 1961, he was appointed Professor of International Economics at the Stockholm University. The same year he founded the Institute for International Economic Studies, at the Stockholm University.

At present, he is the Chairman of the Board of the Stockholm International Peace Research Institute and the Latin American Institute at Stockholm.

In 1970 the Myrdals were named the recipients of West Germany's peace prize. Myrdal is also a Fellow of the Economic Society and an honorary member of the American Academy of Arts and Sciences.

Myrdal's contribution to economics and other disciplines is rich and varied. His principal works are:

1. *The Cost of Living in Sweden: 1830-1930* (1933),
2. *Monetary Equilibrium* (1939),
3. *An American Dilemma : The Negro Problem and Modern Democracy* (1944),
4. *The Political Element in the Development of Economic Theory* (1953),
5. *An International Economy, Problems and Prospects* (1956),
6. *Economic Theory and Underdeveloped Regions* (1957),
7. *Value in Social Theory* (1958),
8. *Beyond the Welfare State : Economic Planning and Its International Implications* (1960),
9. *Challenge to Affluence* (1963),
10. *Asian Drama : An Inquiry into the Poverty of Nations* (1968),
11. *Objectivity in Social Research* (1969),
12. *The Challenge of World Poverty : A World Anti-poverty Programme in Outline* (1970),
13. *Against the Stream : Critical Essays on Economics* (1973).

In collaboration with Alva (his wife) Professor Myrdal wrote in 1934 *Crisis in the Population Question* which examined Sweden's declining birth rate. In this they offered a radical suggestion that parents should have only wanted children.

In 1943, Myrdal brought out *Population : A Problem for Democracy.*

Myrdal's *Monetary Equilibrium* published in Swedish, English and German languages, initiated re-examination of Wicksellian criteria of monetary equilibrium.

Myrdal's classic work, *An American Dilemma* (1944) ran to more than two dozen editions and brought him international fame. In this book Myrdal accurately forecast many of the difficulties that would arise in the sixties in the U.S. in respect of social life. In 1976, the aforementioned book was followed by *An American Dilemma Revisited: The Racial Crisis in the United States in Perspective.*

In his *The Political Theory in the Development of Economic Theory*, Professor Myrdal ridicules the effort to free economics from value judgements and by implication deprecates politically or philosophically oriented economic analyses.

In *An International Economy*, Dr. Myrdal examines the problem of achieving economic integration on a world scale.

He is of opinion that large scale investment and aid from rich countries to the poor economies is the present prime need to promote worldwide solvency and prosperity. The above-quoted book "ranges prophetically beyond the formal boundaries of economics: it brings politics, diplomacy, sociology, and current history into focus with the whole problem of creating an international economy as a foundation to world peace."

Myrdal's fundamental work *Economic Theory and Underdeveloped Regions* deals with the causes of international disparities. In this book, he speaks of "backwash effects" of the growth of the industrial economies on the industries of the poor countries. He builds his theory of development around the idea of regional inequalities on the global plane. To explain it, he employs the notions of "backwash" and "spread" effects.

His *Challenge to Affluence* is an incisive examination of important minority focal points of disguised poverty within the apparent overall prosperity.

Myrdal's *magnum opus* **Asian Drama** runs into 2284 pages. It took him ten years to complete it. The book exmines the pathetic plight of the one quarter of humanity living in eleven oriental countries.

The thesis of the *Drama* is that reforms are urgently needed in agriculture, land distribution, population control, health care and education. Professor Myrdal advises that the affluent societies should not only step up the flow of capital to South Asia, but also assist the vast area by purchasing more of the latter's manufactured products even by preferential methods and by subsidizing such imports. The lack of strong effective regimes capable of forcing a change in the ingrained superstitions and immobile social customs is singled out by Myrdal as one of the major impediments to real progress in all of South Asia. He warns: "There is little hope in South Asia for rapid development without greater social discipline." He avers that the essential impulse for change and progress must come from the South Asian nations themselves.

In 1970 summary and extension of *Asian Drama*, only about one-fourth long, captioned *The Challenge of World Poverty : A World Anti-poverty Programme in Outline*, was published. In this Myrdal explains the failure of post-war development and offers many policy prescriptions on a wide range of problems. He advocates *inter alia* removal of corruption, imposition of social discipline and functional adult education for the poor nations. To him agriculture is the only hope of the third world.

Myrdal is afraid that the present global inflation might be followed

by another Great Depression. He notes, "America is the one rich country with the biggest slums, the least democratic and least developed health system, and the most niggardly attitude against its old people". Yet Myrdal is a great admirer of the U.S.

Compiler

NANJUNDAPPA, DOGGANAHAL MAHADEVAPPA (b. 1929) (*History of economic thought)

A distinguished Indian economist and an authority on public finance and planning.

Born on October 25, 1929 at Dogganahal village in Chitradurg district of Karnataka, Nanjundappa passed B.A. (Hons.) in first class in 1948 and secured first class first rank in M.A. in 1951 from Mysore University which awarded him the next year Ph.D. degree for his thesis *Economic Policy and Full Employment*.

Dr. Nanjundappa started his career in 1952 as a lecturer in economics in Mysore University. He taught for two years. From 1954 to 1956 he was Government of India Research Scholar. He served as Assistant Director in Ministry of Commerce and Industry, Government of India, from 1956 to 1959, and Deputy Director of Studies and Research at the National Institute for Community Development for one year in 1960. In 1961 he joined Karnataka University as Reader and Head of the Department of Economics and in 1967 he was promoted as Professor and Head of the Department of Economics. In August 1972 he was further elevated as Senior Professor and Head of the Department of Economies. Hardly three months had elapsed, there came a call to him to join the Government of Karnataka and in November 1972, Dr. Nanjundappa took over as Economic Adviser to the Government of Karnataka. Recognising his exceptional calibre, the Government made him also the Secretary in the Department of Planning. He spent eight long years in Bangalore in the above capacities and during this period he considerably influenced government thinking on Karnataka's economic development. In May, 1981 he was asked by the Government of Karnataka to take over as Vice-Chancellor of Karnataka University. He has immortalised his name in the annals of the educational history of the University by revamping its affairs. In 1981, the Indian Economic Association honoured Dr. Nanjundappa by electing him its president.

Dr. Nanjundappa did post-doctoral research at Harvard University in 1963-64 and advanced research between 1968 and 1970 at Universities of Manchester, Cambridge and London. In 1973, he conducted a study of rural income distribution at Sussex University.

Professor Nanjundappa who combines in himself rare intellect and hard work is the recipient of innumerable medals, international fellowships and professional honours. Besides, he has served as a member on several

central and state level committees. He has attended many conferences, seminars and workshops. He has guided a number of Ph.D. candidates and directed research projects.

Dr. Nanjundappa, a prolific writer, has to his credit a large number of significant books and thought provocative articles/papers. His major works include:

1. *Community Development and Employment* (1963),
2. *Local Taxation in Urban Areas* (1967) (Co-author),
3. *Surplus Rural Man-power and Economic Development in Mysore* (1971),
4. *Resale Price Maintenance in a Developing Economy : Origin and Extent* (1971),
5. *Road User Taxation and Road Finance in Indian Economy* (1973),
6. *Transport Planning and Finance* (1973),
7. *Some Aspects of Karnataka's Economy* (1973),
8. *Inter-Governmental Financial Relations in India* (1974),
9. *Budgeting of Road Expenditure* (1974),
10. *Rural Development in Karnataka* (1975),
11. *Studies in Public Finance* (1976),
12. *Essays in Indian Economic Problems,*
13. *Development with Social Justice,*
14. *Finances of Panchayat Institutions,*
15. *Land Reforms in Karnataka.*

Compiler

NAOROJI, DADABHAI (1825-1917) (*History of economic thought)

The father of Indian nationalism, "the pioneer of the systematic analysis of the causes of the Indian economic impoverishment", the author of "Drain theory", and the first Indian to measure India's national income.

Born on September 4, 1825 in a rich Parsi family of Bombay, Naoroji was the first Indian Professor in Elphinstone College, Bombay; the first Indian M.P. in England; the first Indian Member of a Royal Commission; the co-founder of the London Indian Society; and a Director of the Queen Insurance Company.

After practising law for some time, Naoroji became a partner in the Cama and Company, the first Indian firm established in London. In 1859, he started his own firm—Dadabhai Naoroji and Company. Soon he drew himself to politics and was elected president of the Indian National Congress in 1886, 1893 and 1906.

Naoroji's celebrated book *Poverty and un-British Rule in India* was published in 1901. It was the first economic work on poverty. He also wrote several papers on the Indian economy. One of the papers was "England's Duties to India".

Naoroji demanded the complete and annual estimates of the per capita income for British India. By calculating the per capita income in Bombay presidency for 1867-70 at Rs. 20, he established the dire poverty of the masses. He calculated that at least Rs. 34 per head were required to satisfy the minimum needs of an Indian common man.

Naoroji told the British that the main cause of India's poverty was the exhaustion of the precious wealth in the form of continuous drain on her annual production on account of excessive expenditure incurred on the European services and interest paid on the public debts which were caused by the British rule in India.

He critically examined the burden of taxation, home charges and profitless exports and developed the theory of foreign exploitation, popularly called the *Drain Theory*. The drain increased from £ 3 million in the beginning of the 19th century to £ 30 million at the end of the century. This drain, Naoroji argued, was the chief cause of India's poverty.

He gave the contemporary Indian economists the notion that production was the key to progress. He warned the British that introduction of gold currency would impoverish the poor.

Naoroji might be considered as the originator of the modern Indian economic thought.

Compiler

NARAIN, BRIJ (1888-1947) (*History of economic thought)

A brilliant Indian economist.

Brij Narain who was professor of economics in the S.D. College, Lahore, was a prolific writer. His important publications include:

1. *Essays in Indian Economic Problems* (1919),
2. *The Population of India* (1925),
3. *Indian Economic Life* (1929),
4. *India in the Crisis* (1934),
5. *Tendencies in Recent Economic Thought* (1935),
6. *India Before Crisis* (1935),
7. *India Before and Since the Crisis* (1939),
8. *Marxism Is Dead* (1939),
9. *Charkha, Marxism, Indian Socialism* (1941),
10. *Principles of Economics* (1941),
11. *Indian Economic Problems, Pre-war, War and Post-war* (two volumes) (1944),
12. *Curve Fitting for Students of Economics* (1944),
13. *Money and Banking* (1946),
14. *Economic Structure of Free India* (1946).

Brij Narain opined that economic laws were universally applicable. He made the meaning of the term "Indian economics" clear by observing that "It means a mass of statistical and other material which would be of invaluable help in the solution of Indian economic problems. It does not mean a science with peculiar laws or principles or any proposed solutions of Indian economic problems, or any new method or methods of dealing with them". He maintained that India's poverty could be eradicated through the Western type industrialism. He advocated nationalisation of land and diversion of surplus agricultural labour to manufacturing industry. He first advocated socialist planning of the Soviet type but later switched over to democratic planning. He admitted that the contribution of Indian economists to economic theory was practically nil; their work was largely descriptive and historical like that of the American *institutionalists.*

Brij Narain who is considered as the first Indian Economist who made original contribution to the development of the science of economics, held that economics was a statistical science.

Professor Brij Narain met with a tragic death during communal disturbances in Lahore on August 14, 1947.

Compiler

NATIONAL BALANCE OF TRADE (*International economics)

Balance of trade of a country. The term, according to Jacob Viner, seems to have been coined in 1615.

Compiler

NATIONAL BANK (*Monetary economics)

A Bank in the U.S.A. registered under federal law.

Compiler

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT (NABARD)(*Agricultural economics)

The NABARD is the all-India level apex Bank set up for providing credit, through established banking channels, for agriculture, small scale industries, cottage and village industries, handicrafts and other allied economic activities in rural areas with a view to promoting integrated rural development. It is also expected to play a significant role in the field of extension agencies *inter se* with a view to ensuring successful implementation of schemes refinanced by it.

The first task of NABARD was to bring about the merger of the three constituent units *viz.*, Agricultural Refinance and Development Corporation (ARDC), and Agricultural Credit Department and Rural Planning and Credit Cell of the Reserve Bank of India.

The Bill for setting up NABARD was passed in December 1981. The NABARD was to start its operations on April 1, 1982, but it came

into being on July 12, 1982. It was inaugurated by the former Prime Minister (late) Mrs. Indira Gandhi, on November 5, 1982. The initial capital is Rs. 10 crores which will be equally contributed by the R.B.I. and the Union Government.

The establishment of the NABARD is a milestone in the history of Indian Banking as it has fulfilled one of the aspirations of the rural people in general and translates the recommendations made by several committees which favoured the establishment of a separate bank at the national level for accelerating the process of development of agriculture, rural industries and allied activities.

On the day of its inauguration the NABARD had Mr. M. Ramakrishnayya and Mr. Sant Dass as its Chairman and Managing Director respectively.

Compiler

NATIONAL BANK OF ALBANIA (*Monetary economics)

Central Bank of Albania founded in 1925.

Compiler

NATIONAL BANK OF AUSTRIA (*Monetary economics)

Central Bank of Austria. It was instituted in 1817 in order to restore order in the monetary position of Austria, which had seriously deteriorated as a result of the excessive issue and depreciation of Government paper money. The Bank was reorganised in 1878 as the Bank of Austria-Hungary.

M.H. dekock

NATIONAL BANK OF BELGIUM (*Monetary economics)

Central Bank of Belgium, created in 1850 as the sole bank of issue and the financial agent of the Government.

M.H. dekock

NATIONAL BANK OF CUBA (*Monetary economics)

The Central Bank of Cuba set up in 1948.

Compiler

NATIONAL BANK OF CZECHOSLOVAKIA (*Monetary economics)

The Central Bank of Czechoslovakia founded in 1926.

Compiler

NATIONAL BANK OF HUNGARY (*Monetary economics)

Established in 1924, it is the Central Bank of Hungary.

Compiler

NATIONAL BANK OF IRAQ (*Monetary economics)

The Central Bank of Iraq, established in 1949.

Compiler

NATIONAL BANK OF PERSIA (*Monetary economics)

The central Bank of Persia (Iran) started in 1928.

Compiler

NATIONAL BANK OF POLAND (*Monetary economics)

The Central Bank of Poland founded in 1945.

Compiler

NATIONAL BUREAU OF ECONOMIC RESEARCH (*Economics of development)

Internationally reputed American non-project research centre founded by W.C. Mitchell and developed by Simon Kuznets. It has made pioneering investigations of national income measurement, business cycles, price analysis, productivity changes and many other topics. This institutionalist organization specialises in the application of statistical data to all branches of economics.

Compiler

NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH (NCAER) (*Economic research)

A leading economic research organisation of India. Located in New Delhi, it was established at the initiative of the late Dr. P.S. Lokanathan. It started functioning from August 1, 1956 and the founder Director-General of the Council was P.S. Lokanathan himself.

The Council is an independent research organisation; it studies important economic problems on an objective basis on its own initiative or at the instance of the Government, business concerns, associations, or individuals and helps in analysing and finding solutions to specific problems in the planning and management of industrial and other undertakings.

The studies cover area surveys, taxation, finance, industry, agriculture, demand forecasts, energy, transport, savings, consumption, planning and general studies. Its techno-economic surveys of the states represent a very significant contribution to the analysis of economic problems of the country.

Compiler

NATIONAL CREDIT COUNCIL (NCC) (*Monetary economics/ Economic history)

A high level body set up in terms of Government Resolution dated December 22, 1967 with a view to providing a forum for discussing and assessing credit priorities on an all-India basis.

It has 25 members, with union the Minister of Finance as Chairman and the Governor of the Reserve Bank of India as the vice-Chairman.

Compiler

NATIONAL DEVELOPMENT COUNCIL (NDC) (*Economics of planning)

During the discussion with states for preparing the Draft outline of the first Five-Year Plan, the Planning Commission felt that it would be useful to have a "forum such as a National Development Council at which from time to time the Prime Minister of India and the Chief Ministers of States can review the working of the plan and of its various aspects." This proposal was put forward tentatively in the Draft outline published on 7 July, 1951 and was widely welcomed. The Government of India, therefore, established the National Development Council by a resolution dated 6 August, 1952.

The N.D.C. held its first meeting in November 1952.

V.T. Krishnamachari

The functions of the National Development Council will be :

1. to review the working of the National plan from time to time;
2. to consider important questions of social and economic policy affecting national development; and
3. to recommend measures for the achievement of the aims and targets set out in the national plan including measures to secure the active participation and co-operation of the people, improve the efficiency of administrative services, ensure the fullest development of the less advanced regions and sections of the community and through sacrifices borne equally by all citizens, build up resources for national development.

The National Development Council, which will make its recommendations to the central and state Governments will be composed of the Prime Minister of India, Chief Ministers of all the States and the Members of the Planning Commission.

Government of India

NATIONAL DIVIDEND (*Economics of development)

The sum of all the different kinds of wealth produced by the factors of production in a year in a country.

Briggs and Jordan

NATIONAL INCOME (*Economics of development)

Total consumption plus total investment (in a country in a year).

Frederic Benham

Gross national product (GNP) or net national product (NNP).

G.M. Meier and R.E. Baldwin

The aggregate value of the net output of a community.

G.J. Stigler

The concepts of GNP, NNP and national income were originally developed by the National Bureau of Economic Research, U.S.A., founded by W.C. Mitchell.

National income=GNP−Capital depreciation allowances and indirect business taxes.

Alak Ghosh

In its broadest and most commonly used sense, it means the aggregate output produced by the residents of a given nation or the income received by them in a given period. In its technical meaning, national income refers specifically to one measure; the aggregate income earned from current production.

W.W.Haines

A sum of the expenditures made in a year by all the families composing the nation (plus expenditure on investment for new capital goods and the balance, positive or negative, of exports over imports).

Joan V. Robinson

The sum total of wages, salaries, profits, interest, rents of land and buildings including the case of owner occupiers, received within the year.

Bowley and Stamp

The aggregate net product of and the sole source of payment for all the agents of production.

Alfred Marshall

The summation of the net value of final goods and services produced during a period.

There are five different concepts of national income. They are designated GNP, NNP, National Income, Personal Income and Disposable Income.

Allen, Buchanan and Colberg

That portion of the value of the national product that flows to the several factors of production.

Fairchild, Buck and Slesinger

National income (at factor costs in contrast to market price)	=	NNP—(indirect taxes and related liabilities, business transfer payments, i.e., gifts and charities on the part of business firms and losses by theft or bad debts)+(subsidies less current surplus of government enterprises)+(statistical discrepancy).

Raymond Bye

The idea of national income can be traced to the 17th century when Sir William Petty of England and Pierre Boisguillebert of France initiated their enquiries. While the Mercantilists in the 16th and 17th centuries had a notion of national wealth, they were uninterested in or unaware of national income.

William Petty, a physician and one time professor of anatomy, was the first to develop clearly the concept of national income as an analytical tool. In 1665, he made the first known estimate : 40 million pounds sterling for England.

Gregory King, a map maker followed Petty in the late 17th century in estimating national income of England.

Sam Rosen

Simon Kuznets has done much to develop national income measurements.

George Soule

National income may be defined as the net product of, or net return on, the economic activity of individuals, business firms and the social and political institutions that make up a nation.

Simon Kuznets

The aggregate earnings of labour and property which arise from the current production of goods and services by the nation's economy.

The U.S. Department of Commerce

It may be defined as the net total of commodities and services (economic goods) produced by the people comprising the nation; as the total for such goods received by the nation's individual members in return of their assistance in producing goods and services; as the total of goods consumed by these individuals out of the receipts thus earned; or finally as the net total of desirable events enjoyed by the same individuals in their double capacity as producers and consumers. Defined in any way of these fashions, national income is the end product of a country's economic activity.

Simon Kuznets

National income is technically called the gross national product (GNP). It is the loose name given to the money measure of the over-all annual flow of goods and services in an economy. Often, instead of it, we use the almost equivalent precise term "national product" or "net national product" (NNP); or the slightly different concept of "gross national product",

P.A. Samuelson

NATIONAL INCOME COMMITTEE (*Economics of development/ Economic history)

The committee which was appointed by the Government of India in August 1949 with Prof. P.C. Mahalanobis as chairman and Dr. D.R. Gadgil and Dr. V.K.R.V. Rao as members and with the collaboration of the National Income unit and assistance of some foreign experts like Nobel laureate Prof. Simon Kuznets, to estimate India's National income for 1948-49. The first report submitted by the Committee in April 1951 contained national income estimates for 1948-49 and the final report submitted in February 1954, contained revised estimates for 1949-50 and 1950-51. The Committee for the first time presented an authoritative estimate of India's national income.

Compiler

NATIONAL PLANNING (*Economics of planning)

A type of Planning. When the area of a planned economy tends to coincide with the entire political boundary or territory, it is called national planning.

B.C. Tandon

NATIONAL PLANNING COMMISSION OF INDIA (*Economics of planning)

It was set up in March 1950 by the Government of India by a Resolution as an instrument for "the most effective and balanced utilisation of the country's resources." It is entrusted with the responsibility of framing country's economic plans, appraising the progress achieved under each plan, and making recommendations on economic and social goals, policies and institutions.

Originally it was to be a temporary body; but it has come to stay.

The Commission launched the First Five-Year Plan in 1951. So far it has completed five quinquennial plans and three annual plans. The Sixth Five-Year (new) Plan has commenced on April 1, 1980.

The Prime Minister is the ex-officio Chairman of the Commission. The de facto chief of the commission is the Deputy Chairman. Besides him, there will be three to seven members. The present Deputy Chairman is Manmohan Singh.

The Planning Commission with a vast machinery is housed in *Yojana* Bhavan at New Delhi.

The Commission is assisted by National Planning Council created in February 1965. The Plan documents prepared by the Commission have to be approved by the country's supreme economic body, the National Development Council, of which the Chief Ministers of the States are the members.

Compiler

NATIONAL SAMPLE SURVEYS (NSS) (*Statistics)

At the instance of the late Mr. Jawaharlal Nehru, the late Professor P.C. Mahalanobis prepared an abstract scheme of organising a National Sample Survey (NSS) which was approved in principle by the Government of India in January 1950. A Directorate of National Sample Survey was set up under the Ministry of Finance to collect economic and social information from the whole country on the basis of random sampling.

The statistical work of the NSS is done in the Indian Statistical Institute (Calcutta). The first round of the NSS was started in October 1950. In this a sample of 1833 villages was selected for investigation.

D.N. Elhance

NATIONAL WEALTH (*Economics of development)

In a broad sense, it includes all that assists directly or indirectly, the productive capacity of the country.

Statisticians define it as the sum total of possessions held by the inhabitants of a country, singly and collectively, which may be exchanged or transferred.

Briggs and Jordan

Individual and collective property of the members of a state.

Alfred Marshall

NATIONALISATION (*Economics of development)

Public ownership of the means of production.

P.C. Jain

Taking over of an industry by the state.

Frederic Benham

It is also called socialisation.

Compiler

NATIONALISM (*History of economic thought)

Economic nationalism.

Compiler

NATURAL INCREASE (*Demography)

The excess of births over deaths.

Alfred Marshall

NATURAL PRICE (*Theory of value)

The cost-determined equilibrium price to which there exists a long-run tendency.

OR

The level at which market price would settle down.

W. Fellner

The term "natural price" is coined by Adam Smith.

Compiler

When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price.

Adam Smith

NATURAL RATE OF GROWTH (*Economics of development)

It is the concept of Sir Roy F. Harrod of England.

Compiler

It means the rate of advance which the increase of population and the technological improvements allow.

R.F. Harrod

NATURAL RATE OF INTEREST (*Theory of value)

The rate at which the demand for loan capital just equals the supply of savings.

Knut Wicksell

Equilibrium rate of interest.

Compiler

NATURE'S REMEDY (*Keynesian economics)

It is a rise of prices sufficient to divert real resources out of the pockets of the main body of consumers into the pockets of the entrepreneurs and thence to the Treasury, partly in the shape of a higher yield from existing taxes particularly Excess Profits Tax and partly in contributions to loans out of the increased savings and reserves of the entrepreneurs.

J.M. Keynes

NEAR GOODS (*Theory of value)

Consumption goods.

Raymond Bye

NEAR MONEY (*Monetary economics)

Anything that can be readily turned into money at a known value, predominantly savings accounts and savings bond.

W.W. Haines

Bank deposits, Bills of exchange, are some of the examples of near money.

Anything which is very close to money but still not quite within the definition of money.

G. Crowther

Short-term government securities sometimes even long-term securities are considered to be near-money. To the extent that their values are constant in terms of money, they have the quality of money as a store of value and can be converted into money for spending purposes without loss. But they are not themselves commonly used as a means of payment.

L.V. Chandler

The total savings deposits which any person could quickly cash in and the total of Government bonds which anyone could present for redemption or sell for cash in the open market.

P.A. Samuelson

NECESSARIES (*Theory of value)

They are of three types: *Necessaries of life* which are the goods that are absolutely essential for our existence. *Necessaries of efficiency* are the goods which augment our efficiency. *Conventional necessaries* are the goods to which a person is addicted.

Compiler

Commodities for which demand is inelastic.

Briggs and Jordan

NEED (*Theory of value)

The state of an individual in relation to the means necessary or useful for the existence or his development.

Bettelheim

NEGATIVE INCOME ELASTICITY OF DEMAND (*Theory of value)

It occurs when an increase in money income of the consumer is followed by a fall in the quantity of goods bought as in the case of inferior goods.

Compiler

NEGATIVE INCOME TAX (*Public finance)

Income maintenance programme—family incentive allowances or automatic payments to all families with low enough income or incentive guaranteed-income plan. It has been advocated by Milton Friedman and

James Tobin as a cheaper and more humane device to replace or supplement the existing mess of welfare assistance by the Government, we support it.

P.A. Samuelson

NEGATIVE RATE OF TIME PREFERENCE (*Theory of value)

Preferring to have an equal amount of goods in the future rather than in the present.

A.L. Meyers

NEGATIVE SAVINGS (*Monetary economics)

Borrowings.

George Soule

NEGATIVE WEALTH (*Theory of value)

Things which are injurious to man.

Compiler

NEGOTIABLE INSTRUMENT (*Monetary economics)

A promissory note or bill of exchange that conforms to certain legal requirements and is readily transferred (negotiated) from one holder to another with maximum safety.

W.W. Haines

NEO-CLASSICAL THEORY (*History of economic thought)

Economics of Alfred Marshall and his followers or simply Marshallian economics. (See "Alfred Marshall").

Compiler

NEO-CLASSICAL THEORY OF INTEREST (*Theory of value)

Loanable funds theory of interest. First formulated by Knut Wicksell, it was later developed by Myrdal, Ohlin, Lindahl, Pigou, Robertson and some other neo-classicists.

According to it, the rate of interest is determined by demand for and supply of loanable funds. (See also "Loanable funds theory of interest").

Compiler

NEO-MALTHUSIANISM (*Demography)

It refers to population control through planned parenthood. This is an improvement over Malthusian theory which argued for population control through celibacy and moral restraint.

Compiler

NEO-WICKSELLIAN THEORY OF BUSINESS CYCLE (*Business cycle)

A type of over-investment theory of business cycle. The theory believes that monetary forces operating under a particular form of credit organisation (banking system) produce the disequilibrium between the lower and higher stages of production.

Gottfried Von Haberler

NET FOREIGN INVESTMENT (*International economics)

It is the excess of the nation's export of goods and services over its imports of goods and services and its net gifts and grants to foreigners.

L.V. Chandler

Exports on current account minus imports on current account. It is equal to both the export balance on current account and the import balance on capital claims account.

W.W. Haines

NET INCOME (*Public finance)

Gross income minus expenses incurred on earning that income.

Compiler

NET INTEREST (*Theory of value)

Pure interest—payment for the mere use of money.

Briggs and Jordan

NET INVESTMENT (*Keynesian economics)

Net additions to all kinds of capital equipment, after allowing for those changes in the value of the old capital equipment which are taken into account in reckoning net income.

J.M. Keynes

Gross investment—depreciation.

P.A. Samuelson

The excess of net output over consumption.

Dudley Dillard

NET MARGINAL PRODUCT (*Theory of value)

The marginal gross value product minus all other additional costs except the payment to the added unit of the factor of production. This N.M.P. is what is ordinarily meant when the term "marginal product" is used without qualification.

A.L. Meyers

NET NATIONAL PRODUCT (*Economics of development)

After deducting from gross national product the depreciation and capital consumption, the resulting figure is known as NNP.

Frederic Benham

Gross national product minus depreciation and obsolescence of capital assets.

Dudley Dillard

NNP or "national income evaluated at market prices" as it is technically named, is definable as the total money value of the flow of final products of the community.

It is also definable from a second point of view as the total of factor earnings that are the cost of production of society's final goods.

P.A. Samuelson

Gross national product minus capital consumption allowance.

Sam Rosen

NET PRODUCT (*Economics of development)

Variable capital+Surplus.

Karl Marx

Every productive undertaking of necessity involves certain outgoings—a certain loss. In other words, some amount of wealth—an amount that ought to be subtracted from the amount of net wealth produced. This difference, measuring as it does the excess of the one over the other constitutes the net increase of wealth known since the time of the Physiocrats as the "net product".

C. Gide and C. Rist

NET PROFITS (*Theory of value)

Pure profits –the residual surplus left when all the necessary expenses and hires in connection with production have been met.

Briggs and Jordan

NET REPRODUCTION RATE (*Demography)

"The rate at which the female population is replacing itself."

Quoted

The excess of births over deaths.

General definition

The rate at which population increases in each generation.

The concept was first stated by Kuczynski to enable us to know the correct trend of the growth of population.

A.B. Das and M.N. Chatterji

NET RETURNS (*Theory of value)

(Price × output) − (production costs + selling costs).

A.L. Meyers

NET REVENUE (*Theory of value)

Revenue minus variable costs.

D.S. Watson

NET WORTH (*Theory of value)

The value of an individual's or organisations' assets after deducting the claims of creditors.

W.W. Haines

NEUMANN, JON VON (1903-1957) (*History of economic thought)

The co-author of economic classic, *Theory of Games and Economic Behaviour* (1944). It is this work in which Neumann and Oskar Morgenstern evolved the method of measuring utility. Again it is this work which propounded the revolutionary 'game' theory of oligopoly. This theory helps economists "understand the complicated pattern of action and reaction typical of oligopolistic markets."

Jon Von Neumann was an outstanding mathematician of Hungary. He is also one of three coinventors of the United States hydrogen bomb.

In 1932, Neumann presented a general equilibrium model which differs from that of Leon Walras.

Compiler

NEUTRAL EQUILIBRIUM (*Theory of value)

A type of equilibrium. A system is in neutral equilibrium if, when any disturbance takes place, no re-establishing forces, but also no further disturbing forces are evoked so that the system remains at rest in the position to which it has moved. An egg lying on its sides is in neutral equilibrium.

A.C. Pigou

NEUTRAL EQUILIBRIUM VALUE (*Theory of value)

An equilibrium value that does not know any forces which tend to reproduce the old value.

J.A. Schumpeter

NEUTRAL INVENTION (*Economics of development)

Invention that a constant rate of interest does not change the ratio of the value of capital in use to income per period (the quantity of capital per unit of output, i.e., capital coefficient remains constant).

Sir Roy F. Harrod

The invention that raises the marginal productivity of labour and capital in the same proportion.

J.R. Hicks

NEUTRAL MONEY (*Monetary economics)

A system in which money would be a passive thing, facilitating the operations of exchange, but not distorting them in any way.

The neutral money advocates believe that we could approximate this, not by stabilizing prices but by stabilizing level of per capita money incomes.

Raymond Bye

An arrangement in which the quantity of money would be so controlled as to have the result that the total output, the total purchases and sales, and the prices of goods and services are exactly what they would be in a non-money-using economy in which, however, the shortcomings of barter are overcome.

George N. Halm

Philip H. Wicksteed, F.A. Von Hayek and D.H. Robertson are the advocates of neutral money policy.

Compiler

NEWCOMB, SIMON (1835-1909) (*History of economic thought)

An eminent American mathematician and astronomer. However, he is remembered as an economist, if not professional but general, for his original work *Principles of Political Economy* (1885). In this book he gave the fundamental equation V.R=K.P which he called "equation of societary circulation."

Where V is the volume of currency, R, the rapidity of circulation of the whole volume of currency, P is the price level and K the industrial circulation on the scale of prices which we take as unity. According to Schumpeter, Newcomb of John Hopkins is chiefly remembered "as a sound-money man and *laissez-faire* ultra."

Compiler

NEW DEAL (*Economics of development)

It refers to American President Franklin D. Roosevelt's Keynesian economic recovery programme introduced in 1933.

The Great Depression burst in 1929. President Hoover failed to rectify the situation. President F.D. Roosevelt assumed office on March 4, 1933. Soon he declared the anti-depression policy, "Our task now is...... the business of administering resources and plants already in hand of seeking to re-establish foreign markets for our surplus production, of meeting the problem of underconsumption, or of adjusting production to consumption, of distributing wealth and products more equitably, of adopting existing economic organisation to the service of people."

Quickly socio-economic-financial enactment was passed, in two categories. The first related to the immediate and urgent problems while the

latter related to building of more lasting prosperity. The two laws were entitled "Relief and Recovery" and "Reform and Reconstruction". The policies contained in these legislations came to be known as New Deal. The New Deal which gave emphasis on fiscal policy was a success.

Compiler

NEW ECONOMICS (*General economics)

A new name to Keynesian economics.

Compiler

NEW INTERNATIONAL ORDER (NIEO) (*International economics)

The catch-phrase of the 1970's. Demand for it came first in the extraordinary sessions of the U.N. General Assembly in 1974 and 1975.

Bo Sodersten

NEW WELFARE ECONOMICS (*Welfare economics)

There are two types of welfare economics—(i) old or traditional or Neo-classical or Pigovian welfare economics named after A.C. Pigou of England, and (ii) New or Paretian welfare economics named after Vilfredo Pareto of Italy.

The old welfare economics was developed by Pigou in his *magnum opus The Economics of Welfare* (1920) while the doctrine of new welfare economics was originated by Pareto in his greatest Italian work *Manuale di Economia Politica* (1906), later improved and enlarged in the French version *Manuel d'economic Politique* (1909).

Since 1934, the new welfare economics (founded by Pareto) has been developed in two major versions by J.R. Hicks, A.P. Lerner, Nicholas Kaldor and I.M.D. Little in England, H. Hotelling, Abraham Bergson, Oscar Lange, P.A. Samuelson, Kenneth J. Arrow and G. Debreu in the U.S., and Maurice Alias in France. There are many others who have significantly developed it. Some of them are Tibor Scitovsky, M.W. Reder, Barone and Gerhard Tintner.

The new welfare economics, as developed by Pareto, is based on the ordinal utility function, and does not involve inter-personal comparison of utility. Pareto introduced the concept of social optimum and defined it as a state, "where it is impossible to make a small change of any sort such that the ophelmities of all the individuals, except those that remain constant, are either all increased or all diminished." In other words it is a position where no one can be put "on a higher indifference curve without causing someone to drop to a lower one."

The younger welfare economists found the Paretian welfare economics to be indeterminate and limited in scope. Hence between 1935 and 1950, they refined Paretian economics so as to make it more scientific. The first approach known as "compensation principle" is propounded by Hicks, Kaldor and Scitovsky while the second version called "social

welfare function" is expounded by Bergson, Samuelson and Tintner. These two approaches constitute the recent new welfare economics.

According to the compensation principle, any reorganisation will increase social welfare if it is possible for the state to fully compensate the losers out of the funds raised by taxing the gainers and still have a surplus. If it is not possible, the reorganisation will diminish the social welfare.

The social welfare function treats welfare economics as a normative study. "The social welfare function consists of a set of value judgments with the help of which the individual welfare functions are aggregated to obtain the social welfare function." "The function describes some ethical belief—that of a benevolent despot, or a complete egotist, or all men of goodwill." Maximum welfare is found out in two ways—the Samuelson utility—possibility approach and the Bergson contours approach.

Compiler

NEWER BANKING SYSTEM (*Monetary economics)

Banking system other than highly developed banking systems either of the English type or of the American type.

India, Canada, Australia, South Africa are some of the examples of new banking system.

R.S. Sayers

NIGHT SOIL (*Agricultural economics)

Decomposed human excreta. It is a valuable manure, but the traditional Indian farmers are averse to use it.

Compiler

NO HELP WANTED (*Business cycles)

Signboards in the United Kingdom during the Great Depression signifying no vacancy when millions were tramping the streets looking for work at almost any price.

Dudley Dillard

NOBEL PRIZE IN ECONOMICS (*Economics)

The Nobel prize for Economic Science was instituted in 1969 by the Swedish Central Bank at its tercentenary.

The recipients of the Nobel prize are:

1969—The late Ragnar Frisch (Norway)
Jan Tinbergen (the Netherlands)
1970—Paul A. Samuelson (U.S.A.)
1971—Simon Kuznets (U.S.A)
1972—John R. Hicks (U.K.)
Kenneth J. Arrow (U.S.A.)

1973—Wassily Leontief (U.S.A.)
1974—F.A. Von Hayek (Austria)
Gunnar Myrdal (Sweden)
1975—Tjalling Koopmans (U.S.A.)
Leonid Kantorovich (U.S.S.R.)
1976—Milton Friedman (U.S.A.)
1977—Bertil Ohlin (Sweden)
J.E. Meade (U.K.)
1978—Herbert A. Simons (U.S.A.)
1979—Theodore Schultz (U.S.A.) and
Sir Arthur Lewis (U.K)
1980—L.R. Klein (U.S.A.)
1981—James Tobin (U.S.A.)
1982—George J. Stigler (U.S.A.)
1983—Gerard Debreu (U.S.A.)
1984—Stone, Sir John Richard Nicholas (U.K.)

(The profiles of these economists are written in their respective places.)

Compiler

NOMINAL COST (*Theory of value)

Money cost of production.

Compiler

NOMINAL RATE OF INTEREST (*Monetary economics)

Irving Fisher distinguishes between the "nominal or money rate of interest" and the "real rate of interest". The nominal rate of interest is the rate of interest as found in the market.

(Real rate of interest is the money rate of interest corrected for changes in the value of money in terms of goods and services.)

Compiler

NOMINAL WAGES (*Theory of value)

The money wages paid.

Briggs and Jordan

NON-COMPETING GROUPS (*International economics)

A country's labour force consists of different groups of labour (technical, skilled, semi-skilled and unskilled, to mention one common classification) among which mobility is far from perfect. These distinct categories of labour, with rather well marked and enduring differences in wages became known as "non-competing groups".

P.T. Ellsworth

The concept is introduced by J.E. Cairns. It means sharply defined groups of labour between which there is no free movement.

Gottfried Von Haberler

NON-COST PAYMENTS (*Public finance)

Payments which reduce the usable funds of the treasury, but reduce correspondingly the debt obligations.

P.E. Taylor

(See "cost payments" for complete idea).

Compiler

NON-CUMULATIVE PREFERENCE SHARES (*Industrial economics)

Shares which get dividend for the year when sufficient profits have been made.

K.K. Dewett

NON-DURABLE GOODS (*Theory of value)

Perishable goods.

Compiler

NON-ECONOMIC INCOME (*Theory of value)

Gifts, bequests, unemployment insurance etc.

G.J. Stigler

NON-LABOUR INCOME (*Marxian economics)

According to Karl Marx, it refers to capitalists' income.

Compiler

NON-LINEAR PROGRAMMING (*Econometrics)

In economic terms non-linear programming may be described as the analysis of constrained maximization problems in which diminishing or increasing returns to scale are present.

William J. Baumol

NON-MATERIAL EXTERNAL GOODS (*Theory of value)

Relations beneficial to a person with other people such as labour dues and personal services of various kinds.

Alfred Marshall

NON-MATERIAL GOODS (*Theory of value)

Services, goodwill of business etc.

Compiler

NON-MATERIAL INTERNAL GOODS (*Theory of value)

One's own qualities and faculties for action and for enjoyment such as business ability, professional skill.

Alfred Marshall

NON-MEMBER CLEARING BANK (*Monetary economics)

(In the U.S.) a bank that is not a member of the Federal Reserve System, but that maintains with its Federal Reserve Bank a sufficient deposit balance to permit cheques drawn on it to be cleared through the Federal Reserve clearing machinery.

W.W. Haines

NON-NEGOTIABLE CREDIT INSTRUMENTS (*Monetary economics)

Those whose rights are governed by the general common and state laws of contract.

L.V. Chandler

NON-PAR BANK (*Monetary theory)

A bank that levies a special charge (exchange charge) on cheques that are presented for payment through the mail rather than over the counter; that is it refuses to pay such cheques at par (face value).

W.W. Haines

NON-PRICE COMPETITION (*Theory of value)

The salient feature of monopolistic competition. It takes two forms—product differentiation and advertising (selling costs). In non-price competition, the price of the good is held constant.

Compiler

NON-REVENUE RECEIPTS (*Public finance)

Receipts which increase the usable funds of the treasury, but increase correspondingly the debt obligations.

P.E. Taylor

NON-TRANSFERABLE GOOD (*Theory of value)

The goods that or their ownership cannot be transferred from one person to another, e.g. personal skill.

Compiler

NON-TRANSFERABLE GOVERNMENT EXPENDITURE (*Public finance)

Exhaustive expenditure or real expenditure. These are the government expenditures that purchase current services of productive resources for the use of those authorities. They include expenditures on maintenance and building up of the army, navy, air force, civil service, educational service, judiciary, post office, municipal tramway service and so on. This is income generating expenditure.

A.C. Pigou

NORMAL ACTION (*Theory of value)

The action which one expects to be taken by a person or group of persons under given conditions.

Alfred Marshall

NORMAL DEMAND SCHEDULE (*Theory of value)

The table showing the rate of consumption at a number of hypothetical prices.

K.E. Boulding

NORMAL PRICE (*Theory of value)

The price which will make the rate of production and the rate of consumption equal.

K.E. Boulding

Long-period equilibrium price.

Raymond Bye

Normal prices are those which may reasonably be expected in given conditions of demand and supply.

Alfred Marshall

NORMAL PROFITS (*Theory of value)

The level of profits at which there is no tendency for new firms to enter the trade, or for old firms to disappear out of it.

Mrs. Joan Robinson

The payment necessary to keep an entrepreneur in a particular line of production.

J.L. Hanson

The supply price of average business ability and energy.

Alfred Marshall

NORMAL RESULTS (*Theory of value)

Those results which can reasonably be expected as the outcome of a given situation.

Alfred Marshall

NORMAL SUPPLY SCHEDULE (*Theory of value)

The table showing the rate of production at a number of hypothetical prices.

K.E. Boulding

NORMAL TARIFFS (*International economics)

The tariffs ordinarily in force.

Gottfried Von Haberler

NORMATIVE ECONOMICS (*Economics)

As opposed to positive economics, it formulates principles to which ethical significance attaches and engages in deductions from such principles.

W.J. Fellner

Also called welfare economics or ethical economics, it deals with the things as they ought to be. Neo-classicists hold that economics is a normative science while Lord Robbins maintains that it is a positive science.

Compiler

NORMATIVE SCIENCE (*Economics)

Also called regulative science, it is a body of systematised knowledge relating to criteria of what ought to be and concerned with the ideal as distinguished from the actual.

J.N. Keynes

NORTH, DUDLEY (1641-91) (*History of economic thought)

A great English follower of Sri William Petty. Sir Dudley North was the first to uphold free trade and lambast protectionism. He was also perhaps the first, to have a clear idea of 'capital' which he called "stock".

His *Discourses upon Trade* appeared in 1691.

Compiler

NOTING (*Monetary economics)

A minute made on a dishonoured bill or on a slip of paper attached to the bill, by the notary public, containing the date of presentment, notary's charges, a reference to the notary's registrar and his initials.

A.K. Basu

NURKSE, RAGNAR (*History of economic thought)

A foremost 20th century American development economist. He worked as professor of economics in Columbia University. His classic work is *Problems of Capital Formation in Underdeveloped Countries* (1952). His other works, besides a large number of original articles and papers, include *Patterns of Trade and Development (1955) and Equilibrium and Growth in the World Economy* (1961).

Advocating the doctrine of balanced growth, Nurkse defined it as "more or less synchronized application of capital to a wide range of different industries" or "a wave of capital investments in a number of

different industries". He observed, "Balanced growth is a good foundation for international trade, as well as a way of filling the vacuum at the periphery." He held, "As a means of creating inducements to invest, balanced growth can be said to be relevant primarily to a private enterprise system."

Ragnar Nurkse defined capital formation as under :

"The meaning of 'capital formation' is that society does not apply the whole of its current productive activity to the needs and desires of immediate consumption, but directs a part of it to the making of capital goods; tools and instruments, machines and transport facilities, plant and equipment—all the various forms of real capital that can so greatly increase the efficacy of productive effort. The essence of the process then, is the diversion of a part of society's currently available resources to the purpose of increasing the stock of capital goods so as to make possible an expansion of consumable output in the future."

According to Nurkse, capital formation breaks the vicious circle of poverty in the developing countries. He developed the thesis that disguised unemployment in overpopulated poor countries (like India) can be a source of capital formation. It was Nurkse who for the first time elaborated the notion of disguised unemployment as originated by Rosenstein-Rodan.

He showed that it order to eliminate all surpluses and deficits in the balance of payments, the movements, in income must give rise to appropriate amounts of induced investments or disinvestments. He maintained that in order to make the best possible use of available resources, the technique of production adopted must be labour-intensive, that is, have a low capital-labour ratio.

Much of clarity of thought regarding the technique of development of underdeveloped countries owes to the pioneering work of Ragnar Nurkse. Nurkse died in 1959.

Compiler

OCTROI (*Public finance)

Internal tariff in the form of tax upon food-stuffs entering certain cities.

Gottfried Von Haberler

A tax on entry of goods into a local area for consumption, use or sale therein.

D.M. Nanjundappa

A duty levied at the gates of French cities on goods brought in.

Dictionary meaning

An import duty levied on goods entering local boundaries for use, sale or consumption therein.

D.T. Lakdawala

OFFICER'S CHEQUE (*Monetary theory)

A cheque drawn by an officer of a bank on the bank itself.

W.W. Haines

OILSEEDS (*Agricultural economics)

Ground-nut, castor, rape seed, linseed, mustard etc.

Compiler

OHLIN, BERTIL (1899-1979) (*History of economic thought)

An illustrious Swedish economist and the co-winner of Nobel prize in Economics for the year 1977.

Born on April 23, 1899, Bertil Ohlin obtained his Doctor of Philosophy in 1924. He was Professor of Economics in Copenhagan from 1924 to 1929 and in Stockholm from 1929 to 1965. He was Member of Parliament from 1938 to 1962. From 1944 to 1945, he served as Sweden's Minister for Commerce. He was the Leader of the Liberal Party (of Sweden) from 1944 to 1967. From 1956 to 1966, Ohlin was Vice President and/or President of the Nordic Parliamentary Council. He was Member of the Council of Europe from 1949 to 1959 and during various periods in the following years.

Professor Ohlin, a great representative of flourishing Stockholm School of Economics is the recipient of Honorary Doctor of Law, Humane Letters, Economics, Philosophy etc. of Sorbonne, Grenoble, Columbia (New York), Acrbus and Helsingfors universities.

Dr. Bertil Ohlin, a leading specialist in international economics, has a large number of books and articles to his credit. His principal works are:

1. *Interregional and International Trade* (1933) (its last edition appeared in 1968),
2. *The Problem of Employment Stabilization* (1949),
3. *Interest and Prices.*

His articles include:

1. "Some Notes on the Stockholm Theory of Savings and Investment", *Economic Journal*, 1937.
2. "Alternative Theories of Interest", *Economic Journal*, 1937.
3. *The Reparation Problem*, 1928.

Besides his everlasting contribution to the theory of international trade, Ohlin has significantly contributed to monetary theory and business cycles.

Ohlin's greatest contribution is what has come to be called Heckscher-Ohlin Theory of International Trade. In the words of Paul A. Samuelson, "The person who has most clearly emphasized how commodity trade partially relieves the scarcity in all countries of the less abundant factors of production is the Swedish economist and statesman Ohlin." In his *magnum opus Interregional and International Trade*, Ohlin presented Mutual Interdependence theory which is now generally accepted as the most realistic analysis of the nature and cause of international trade. He acknowledged that his theory drew inspiration from Eli Heckscher's 1919 article "The Effect of Foreign Trade on the Distribution of Income" which examined the reasons for differences in comparative costs of production among nations and concluded that they existed only where there was a difference in the relative scarcities of factors of production among countries and that this condition was a prerequisite for international trade.

Ohlin objected to certain classical postulates, e.g. value was determined by costs of production and that labour was immobile between nations. He maintained that international trade was a special case of interregional trade. He employed a regional approach and defined a region as being an area which was endowed with an unique set of factors of production. This theory stresses the mutual interdependence of factor and commodity prices, income, trade and factor movements. Thus Ohlin applied general equilibrium analysis to his theorem.

The modern pure theory of international trade as formulated by Dr. Ohlin, explains the pattern of trade in terms of relative factor endowments of countries and states thus: *a country will tend to have a comparative advantage in those products which use intensively the country's relatively abundant factors of production and, therefore, to import products which use intensively the country's scarce factor.*

Prof. M. Blaug pays high tributes to Ohlin when he writes, 'This theory absorbs Ricardo's law of comparative costs, supplemented by Mill's concept of reciprocal demand but goes beyond it in linking the pattern of trade to the economic structure of trading nations. In this way the H-O theory provides a model for analyzing the effects of a change in trade on the domestic economic structures, and in particular on the domestic distribution of income."

Applying his theory, Ohlin concluded that the United States was capital intensive.

Prof. Ohlin's next important contribution relates to factor price equalization theorem. He demonstrated that international trade and free movement of factors of production between countries would tend to equalize the remunerations of the factors of production in each of the trading countries.

He pointed out that a state of affairs in which labour enjoyed the advantages of a seller's market might not be a pure blessing.

Ohlin controverted Lord Keynes on transfer problem. We have thus the famous Keynes-Ohlin controversy. While Keynes stressed the necessity of opposite price movements in the two countries concerned, Ohlin minimised the importance of price movements in the mechanism of transfer. Gottfried Von Haberler agreed with Ohlin.

Professor Ohlin is one of the exponents of the 'loanable funds theory of interest.' He advised against the use of the term 'planning' in command economies since planning is a much more general term.

He argued that the main problem of harmonisation in a free trade area was maintenance of full employment consistently with the relative wage-price trends necessary to preserve balance of payments equilibrium under fixed exchange rate.

On 14th October, 1977, Professor Bertil Ohlin, jointly with British economist James Edward Meade, was awarded 700,000 Kronor ($ 145,000) Nobel prize in Economics. He was the second Swedish economist to win the prize, the first being Gunnar Myrdal. The Royal Swedish Academy of Science said that it was giving the prize to Ohlin and Meade "for their contribution to the theory of international trade and international capital movements."

Ohlin died on August 3, 1979.

Compiler

OLD STOCKS (*Industrial economics)

Securities (which are traded on the stock exchange) already outstanding in the hands of the public.

Dudley Dillard

OLIGOPOLY (*Theory of value)

Market with few sellers.

W. Fellner

This horrible sounding word means few sellers (and comes from the Greek) '*oligos*' 'few'.

P.A. Samuelson

A form of imperfect competition. It refers to few sellers.

A.W. Stonier and D.C. Hague

A situation in which there are so few sellers that each of them is conscious of the results upon price of the supply that he individually places upon the market. There are several important sub-types of it:

(a) Oligopoly with standardized product-pure oligopoly.
(b) Oligopoly with differentiated products (a special case under monopolistic competition).
(c) Price leadership.

A. Meyers

A state of affairs where the sale of a product is in the hands of a few large independent sellers, each of them acting monopolistically in the sense that he is taking account of the effect on price of variations in his own output.

D.H. Robertson

That situation in which a good is supplied by a small number of sellers, but without definite agreement concerning prices or outputs. It is a step removed from pure monopoly.

Raymond Bye

The industry consisting of a few firms is called oligopoly. It is that situation in which a firm bases its market policy in part on the expected behaviour of a few close rivals.

G.J. Stigler

Oligopoly means a few sellers. Few means a number small enough that each firms knows that its actions visibly affect the whole industry. Rivalry among oligopolistic firms is open and conscious. The products of oligopolistic firms can be physically homogeneous or they can be differentiated. Oligopoly prevails in many American manufacturing industries as well as in many financial and transportation markets.

D.S. Watson

The earliest use of the term "oligopoly" was in 1518 of St. Thomas More's *Utopia* written in Latin. The word used was *oligopolium.*

Fritz Machlup says, "It was only the appearance of the books by Edward H. Chamberlin, Joan Robinson and Heinrich Von Stackelberg in 1932 and 1934 respectively, which firmly established the word oligopoly in economic terminology."

Mrs. Joan Robinson never used the term 'oligopoly'. Stackelberg acknowledges its origin to Chamberlin's *Monopolistic Competition.*

E.H. Chamberlin used the term 'oligopoly' in his article "Duopoly and oligopoly" in the quarterly *Journal of Economics* in 1929. But the editor of the journal, Prof. F.W. Taussig thought the word a monstrosity and deleted it. Chamberlin protested in vain. He had to change the title of the article as "Duopoly: Value where Sellers are Few". However the word 'oligopoly' finally appeared in his *Theory of Monopolistic Competition* in February 1933.

Chamberlin was unaware of any prior use of the term in print. However, Karl Schlesinger (German) had earlier used the adjective "oligopolitische" in his "Theorieder Geld und Kreditwirtschaft". J.A. Schumpeter of Germany was unaware of Schlesinger's use of the term.

Compiler

OLIGOPSONY (*Theory of value)

A market situation in which there are a few buyers. Sellers are many and the buyers compete with one another.

Compiler

ONE ELASTICITY OF DEMAND (*Theory of value)

Elasticity of demand is one if a small change in the price will cause an equal proportionate change in the amount demanded.

Alfred Marshall

ONE HUNDRED PER CENT RESERVES (*Monetary economics)

A proposal that the reserve requirement against demand deposits be raised to 100 per cent.

W.W. Haines

ONE-MAN CONCERN (*Theory of value)

Business or firm owned and controlled by a single firm.

F. Benham

OPEN BACK DOOR (*Uonetary economics)

A procedure under which the Bank of England allows the discount houses or the commercial banks directly temporary accommodation at the back door, i.e., through the Bank of England's own broker in the market at the rate that does not disturb the level of market rates.

R.S. Sayers

OPEN MARKET (*Monetary economics)

It refers to transactions which are not exclusively with banks and includes especially the bond markets of great financial centres.

Dudley Dillard

OPEN MARKET COMMERCIAL PAPER (*Monetary economics)

It represents large scale issues of promissory notes of a corporation similar to bonds but of short term.

W.W. Haines

OPEN MARKET OPERATIONS (*Monetary economics)

An operation by which the central bank in order to increase or decrease the supply of money sells or purchases Treasury Bills and Government securities in the open market.

F. Benham

One of the two great weapons of the central bank of controlling the credit creation. It implies the power of the Central Bank to buy and sell securities.

G. Crowther

The transactions of sale or purchase of securities on its own initiative by the central bank to control the volume of credit in the market.

A.K. Basu

A quantitative method of credit control.

The buying or selling, by central banks, of securities or bills of exchange in the open market with a view to putting additional funds into the market or withdrawing funds therefrom and thus expanding or contracting credit.

This is the meaning applied in Great Britain, the U.S. and a few other countries.

In the wider sense, the term may be held to cover the purchase or sale by the central bank in the market of any kind of paper in which it deals whether Government securities or other securities or bankers' acceptances or foreign exchange generally.

The Bank of England evolved this method in 1914 to supplement bank rate policy which was proving less effective.

Prior to 1914, the Reichs bank was the only other central bank to undertake open market operations in some form.

M.H. Dekock

OPEN OLIGOPOLY (*Theory of value)

As opposed to closed oligopoly, it signifies oligopoly which is open to the entry of rivals.

G.J. Stigler

OPERATING COSTS (*Industrial economics)

All costs incurred in the operation of the business.

George Soule

OPERATIONAL LAG (*Business cycles)

This lag exists between the adoption of monetary measures (e.g. an easy monetary policy) and the monetary measures on the volume of actual expenditures.

Gottfried Von Haberler

OPERATIONAL RESEARCH (*Managerial economics)

Developed in the armed forces during World War II, it is a study of effective use of scarce man-power and other resources. It is applied to industry. In this mathematicised study, economists, mathematicians, accountants, biologists, physicists and psychologists work together to achieve given ends.

Operational research is "the application of mathematical techniques to the solving of business problems." It is also known as operations analysis.

Compiler

OPPORTUNITY COST (*Theory of value)

The cost of a thing, in the last resort, is not the money spent on it or the labour and materials employed on it, but the thing which was most nearly chosen instead the alternative which was foregone. This economists call its opportunity cost.

F. Benham

Gains foregone by not using the same factors of production for other purposes.

W.J. Fellner

The real cost of anything in the sense of the alternative that has to be foregone.

J.L. Hanson

The fundamental concept of cost is *alternative cost,* which means that the cost of anything is the value of the alternative, or the opportunity that is sacrificed. Another name for alternative cost is opportunity cost.

D.S. Watson

Opportunity cost for a good X is the amount of other goods which have to be given up in order to produce one additional unit of X.

Bo Sodersten

OPPORTUNITY COST THEORY OF INTERNATIONAL TRADE (*International economics)

Improved version of comparative cost theory of international trade as propounded by Professor Gottfried Von Haberler. While the term 'cost' refers to 'labour cost' in the Classical theory, it implies 'opportunity cost' in Haberler's doctrine. The theory shows how much of one commodity has to be sacrificed in order to exchange for another.

Compiler

OPTIMUM (*Theory of value)

"The most favourable degree or condition of anything; the conditions that produce the best results."

Quoted

OPTIMUM FIRM (*Theory of value)

Also known as "optimum business organisation", it is that organisation of business enterprise, which, in given circumstances of technology and the market for its product, can produce its goods at the lowest average unit costs in the long run.

Raymond Bye

The best or most efficient size of firm.

J.L. Hanson

OPTIMUM OUTPUT (*Theory of value)

The most economical size of production. The output at which marginal cost equals price.

K.K. Dewett

OPTIMUM POPULATION (*Demography)

The size of population which maximizes per capita output, given the other inputs and state of technology.

G.M. Meier and R.E. Baldwin

Ideal population. Population which combined with the other available resources or means of production, will yield the maximum return.

Briggs and Jordan

In plain English 'optimum' means best. Optimum population is the level of population which maximizes not aggregate welfare but welfare that is broadly, real income per head.

Sir D.H. Robertson

That population which gives the maximum income per head.

Hugh Dalton

That population which just makes the maximum returns possible.

Lionel Robbins

That population which produces maximum economic welfare ..... maximum economic welfare is not necessarily the same as maximum real income per head but for practical purposes it may be taken as equivalent.

Carr Saunders

"The population that enables the community to produce the largest amount of goods and services per head."

Quoted

OPTIMUM PRODUCTION (*Economics of development)

The greatest output that can be reasonably achieved given the general social and organizational structure of society at that time.

W.W. Haines

OPTIMUM TARIFF (*International economics)

A tariff that will result in an increase in the country's export price level or a decrease in the country's import price level.

G.M. Meier and R.E. Baldwin

OPTIMUM THEORY OF POPULATION (*Demography)

A modern theory of population. It states that a country should have optimum population which is neither over-population nor under-population.

Sidgwick is the founder of the theory of optimum population. Later it was Edwin Cannan who used the term 'Optimum' and developed the theory.

Compiler

OPTIONAL MONEY (*Monetary theory)

Money which is not certified at all.

D.H. Robertson

OPTIONAL TENDER (*Monetary economics)

Money the acceptance of which is not enforceable, e.g. bank money.

Compiler

ORDINAL MEASUREMENT OF UTILITY (*Theory of value)

Measurability (of utility) up to a monotonic transformation.

It implies that only the direction (i.e. the sign) of a change in welfare is ascertainable.

Tapas Majumdar

The assumption made by Indifference Curve Analysis. According to it utility of a commodity is not measurable but is comparable.

Compiler

ORDINARY BANKING BUSINESS (*Monetary economics)

Commercial banks carry on ordinary banking business with the general public. Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured (or unsecured) promises of businessmen to repay etc.

R.S. Sayers

ORDINARY BUDGET (*Public finance)

A type of budget.

In periods of war, depression and similar emergencies when the pattern of receipts and expenditures is inevitably greatly altered, it has been recommended that two budgets be prepared. The ordinary budget would present the budget for functions which are relatively permanent and are therefore, ordinary functions. (The emergency budget would present data for functions of an emergency character and, therefore, presumably of short duration.)

P.E. Taylor

ORDINARY SHARE (*Monetary economics)

A share which does not carry fixed rate of dividend and receives a share of the profit only after all other claims have been met.

J.L Hanson

ORGANIC COMPOSITION OF CAPITAL (*Marxian economics)

A concept of Karl Marx.

It is the ratio of constant capital to variable capital (C/V). It can also be expressed as C/C+V, the ratio of constant capital to total capital. It, owing to technological advance, undergoes a continuous change in favour of constant capital.

G.N. Halm

ORIGINAL GOODS (*Theory of value)

Goods which have value but which have not been produced by man. Land is usually regarded as the main example.

K.E. Boulding

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD) (*International economics)

The bigger organisation that replaced the regional OEEC (the Organisation for European Economic Co-operation). The OECD convention was signed in its finality on December 14, 1960 and it came into force on 30th September, 1961.

All the members of erstwhile OEEC Canada and Japan are the members.

The OECD is administered by the Council, the Executive Committee and the Secretariat.

Its objectives are : "achievement of the largest and soundest possible growth in the economies of the contracting countries and also of non-member states in the process of development; expansion of employment; raising of living standards; maintenance of financial stability: growth of the world economy; extension of world trade on a multilateral and non-discriminatory basis, in accordance with international obligations. (Art. 1)."

Compiler

ORGANISATION FOR EUROPEAN ECONOMIC CO-OPERATION (OEEC) (*International economics)

The World War II left Europe in a bad economic shape. In 1947 American Secretary of state Mr. G.C. Marshall expounded the idea of an European Recovery Programme, at Harvard University. On 12th July 1947, the Foreign Ministers of the U.K. and France convened a conference of European states in Paris to formulate a programme of recovery. The

meeting attended by 16 countries created CEEC (the Committee of European Economic Co-operation). On 16th April 1948 was signed the convention establishing OEEC.

On June 3, 1950, the U.S.A. and Canada became associate members. The OEEC aimed at creating a sound European economy through economic co-operation of its members.

OEEC is also known as the Marshall Plan as it was Marshall's master brain that brought the Organisation into being. (See also "Marshall Plan").

Compiler

ORGANISATION OF PETROLEUM EXPORTING COUNTRIES (OPEC) (*International economics)

A cartel of 13 oil-rich countries formed in September, 1960. The members of the OPEC are : (1) Algeria, (2) Ecuador, (3) Indonesia, (4) Iran, (5) Iraq, (6) Kuwait, (7) Libya, (8) Nigeria, (9) Qatar, (10) Saudi Arabia, (11) Venezuela, (12) United Arab Emirates and (13) Gabon.

The OPEC is enggaged in drastic cuts in production, embargo on crude oil and bizarre hike in price since 1973 thereby creating the worst global oil crisis. The price of crude oil which was $ 2 per barrel in 1960 short up to $ 35 per barrel by 1981.

OPEC has president as its Chief.

Compiler

OTHER THINGS BEING EQUAL (*General economics)

A qualifying phrase attached to economic laws. It is also known as *ceteris paribus*, other things remaining the same or constant. Under this phrase several assumptions are made. The phrase is used in view of the fact that Economics is a less exact science. Economics is rendered less exact since it is the study of man's economic behaviour which is more often than not irrational.

Compiler

OUTLAY (*Public finance)

Common meaning is "spending". Technically speaking, it is the laying out of money as demand for the products of current history.

Lord Beveridge

OUT OF POCKET COSTS (*Theory of value)

Variable costs at distinguished from fixed costs.

Compiler

OUTPUT (*General economics)

Something which is sold by the enterprise. It is what the inputs produce. It is also called production.

Compiler

OUTPUT OF A COUNTRY (*General economics)

Goods and services consumed at home and exported.

Frederic Benham

OUTPUT (OR PRODUCTION) OF CAPITAL GOODS (*Keynesian economics)

The increment of fixed capital plus the increment of working capital which will emerge from the productive process as Fixed Capital, in a given period of time.

J.M. Keynes

OUTPUT (OR PRODUCTION) OF CONSUMPTION GOODS (*Keynesian economics)

The flow of available output plus the increment of working capital which willl emerge as available output, during any period.

J.M. Keynes

OUTPUT (OR PRODUCTION) OF INVESTMENT GOODS (*Keynesian economics)

Non-available output plus increment of hoards, in any given period.

J.M. Keynes

OVER-ALL BALANCE OF PAYMENTS (*International economics)

The total of balance of payments on current account and capital account.

Compiler

OVER-DRAFT (*Monetary economics)

An arrangement with the bank that an account may be in debit at any time up to an amount not exceeding an agreed figure, interest being paid not on the agreed maximum debit but on the actual average debit.

Lord Keynes

In the U.S.A. it means that a person who has a deposit account draws cheques to a greater amount than that standing to his credit.

F.W. Taussig

An arrangement in which the client is allowed to draw cheques beyond the amount previously standing to his credit in the banks, books up to the limit set in the overdraft arrangement. This limit will be fixed after the banker has considered the client's needs and prospects of profit.

R.S. Sayers

According to J.M. Keynes, the principle of overdraft is a British "practice of economising the amount of cash deposits."

Compiler

emphasis of the value of strikes and trade unions versus political action makes him a classic in the history and theory of trade unions."

Another significant work of this labour and factory reformer of world repute is *Catechism of the New Moral World* (1834). However, his influence on economic thought is insignificant.

Compiler

P=MV/T (*Monetary economics)

The celebrated mathematical short-hand expression of cash transaction version of the quantity theory of money. Associated with the name of Irving Fisher, it is known as the equation of exchange.

Compiler

PACKAGE PROGRAMME (*Agricultural economics)

Concentration of financial and technical resources over a limited area than by distributing them thinly all over the country.

Alak Ghosh

PACKING (*Industrial economics)

The process of putting commodities into convenient containers or wrappers.

G.W. Forster and M.C. Leager

PAID-UP CAPITAL (*Industrial economics)

That part of the issued capital of a joint stock company, which is actually paid by the shareholders.

Compiler

PAIN ECONOMY (*Economics of development)

Simon Nelson Patten (1852—1922) of the U.S.A. distinguished between "pain economy" and "pleasure economy".

Pain economy is an economic stage in which the efforts of man suffice only to yield the indispensable minimum; to prevent hunger, thirst, freezing; to ward off pain, not to yield satisfaction.

F.W. Taussig

PALGRAVE, SIR ROBERT (1827-1919) (*History of economic thought)

A noted British economist. Knighted in 1909, he edited *The Economist* from 1877 to 1883. He is editor of the famous *Palgrave's Dictionary of Political Economy*.

Compiler

PALKHIVALA, NANI A. (*History of economic thought)

An eminent Indian advocate and a well-known authority on taxation. According to him, India is the highest taxed nation in the world.

Palkhivala served as India's ambassador to the U.S.

Compiler

PANCHAYAT RAJ (*Rural economics)

Panchayat Raj (Democratic decentralisation) in India is a three-tier structure of local self government at the village, block and district levels. The Panchayat Raj institutions are Village Panchayats (at village level), Panchayat Samitis (at block level) and Zila Parishads (at district level).

The principles for this system were laid down in 1958 on the recommendation of Balawantrai Mehta Committee appointed by the Planning Commission in December 1956. Specific powers and functions in the fields of development and local administration have been assigned to the Panchayat Raj Institutions.

Panchayat Raj which now covers almost the entire country has helped the emergence of new leadership in the rural areas and served as a training ground for higher responsibilities. It has made a significant contribution towards bringing about socio-economic regeneration of the village community and has brought the administrative set up closer to the people.

India

PANIC (*Business cycles)

A short lived stringency in the business picture more generally in the financial markets.

Fairchild, Buck and Slesinger

PAPER GOLD (*International economics)

It refers to new money supply created by the International Monetary Fund in order to meet the growing needs of international trade and economic development among its members. According to it, each member will be given Special Drawing Rights (SDRs).

This money supply is referred to as paper gold because it will supplement the role that gold had so long been playing in international commerce.

Now the international liquidity consists of gold, dollars and pounds, 5-years loans in international currencies made available by the IMF and paper gold.

(See also "Special Drawing Rights,").

Compiler

PAPER MONEY (*Monetary economics)

Money made of paper.

Compiler

PAPER STANDARD (*Monetary economics)

Also called fiat standard or managed standard, it is the monetary system in which inconvertible paper currency circulates as standard money.

According to Arnold Toynbee, it originated in China in 790 A.D. France issued paper money in 1788; England in 1729; and the U.S. in 1690 (by the Colonial Government).

Compiler

PARADOX OF THRIFT (*Monetary economics)

An increased desire to consume—which is another way of looking at a decreased desire to save—is likely to boost business sales and increase investment. On the other hand a decreased desire to consume, i.e. an increase in thriftiness—is likely to reduce inflationary pressure in times of booming income; but in times of depression it could make depression worse and reduce the amount of actual net capital formation in the community. High consumption and high investment are then hand in hand rather than opposed to each other.

This surprising result is sometimes called the paradox of thrift.

P.A. Samuelson

PARALLEL STANDARD (*Monetary economics)

Also known as "alternative standard", it is the monetary system in which both gold coins and silver coins circulate side by side and their value in terms of each other is left to be determined by the market forces.

The system was introduced in England in 1663.

Compiler

PARETIAN OPTIMUM (*Welfare economics)

Named after Vilfredo Pareto, an Italian economist, it is a position in which it is impossible to make any person better off (i.e., putting on a higher indifference curve) without making someone worse off i.e., putting on a lower indifference curve).

S.F. Hasan

A Pareto optimum is defined as a position from which it is impossible to improve anyone's welfare, in the sense of moving him to a position that he prefers, by 'transforming' goods and services through production or through exchange without impairing someone else's welfare.

Mark Blaug

PARETO, VILFREDO FEDERICO DAMASO (1848-1923) (*History of economic thought)

An internationally renowned Italian economist.

Born in 1848 in France of French mother and Italian father, Vilfredo Pareto took a Doctor's degree in engineering in 1869. After practising engineeing for 20 years he developed interest in economics. He applied mathematics to economics. He succeeded Leon Walras to the Chair of Economics at the University of Lausanne in 1893 and retired in 1907.

Pareto's great works are:

1. *Cours deconomic Politique* (1896-97);
2. *Manuale di Economia Politica* (1906).

To Pareto economics is a positive science. He discarded the notion of cardinal measurement of utility; introduced the ordinal term 'ophelmite' in place of utility; and translated marginal utility into indifference curves. He refined Edgeworthian technique of indifference preference hypothesis.

He introduced the indifference curve as a tool of economic analysis and refined Walrasian concept of general equilibrium.

Pareto is the founder of new welfare economics. He was the first economist to formulate a positive criterion for increase or decrease in social welfare and thereby to define a position of maximum welfare for society. He introduced the term social optimum and defined it as a position from which no reorganisation of production and exchange can be made to make one better off without making somebody else worse off.

According to Pareto, there is an inevitable tendency for income to be distributed in the same way in every country regardless of social and political institutions and regardless of taxation. This is known as "Pareto's Law".

PAROLE CREDIT (*Monetary economics)

Debt incurred simply on the oral promise of the borrower.

W.W. Haines

PARTIAL EQUILIBRIUM ANALYSIS (*Theory of value)

An analysis of a market that assumes that the price of one commodity can change without significant repercussions on the prices of other goods.

Robert Dorfman

There are two types of economic analysis; Partial and General. Partial equilibrium analysis or particular equilibrium analysis or simply partial analysis is the analysis of firm or industry. (General equilibrium analysis is the study of the economy as a whole).

In this method, "the forces to be dealt with are so numerous that we take a few at a time and work out a number of partial solutions as auxiliaries to our main study. Thus we begin by isolating the primary relations of supply, demand and price in regard to a particular commodity. We reduce to in action all other forces by the phrase "other things being equal." We do not suppose that they are inert, but for the time being we ignore their activity. This scientific device is a great deal older than science; it is the method by which, consciously or unconsciously, sensible men dealt from time to time immemorial with every difficult problem of ordinary life"(Alfred Marshall).

This approach which is also called "*ceteris paribus* analysis" is the counterpart of microeconomics. Though as old as economics, this approach was systematically developed in the hands of Cournot, Von Mangoldt and Alfred Marshall. Dr. Alfred Marshall is considered as the Master of Partial analysis.

Compiler

PARTIAL FIDUCIARY SYSTEM OF NOTE ISSUE (*Monetary economics)

A legal method of regulation of note issue. The system was first introduced in 1844 in England. The primary feature of this system is that of a fixed amount laid down by law which need be covered only by government securities, while all notes issued in excess of this amount must be fully covered by gold.

The system is found to be highly inelastic.

M.H. dekock

PARTIAL PLANNING (*Economics of planning)

As opposed to comprehensive planning, partial planning covers only important sectors or aspects of the economy. Sir Arthur Lewis calls it "piece-meal planning which may be required in those sectors of the economy where the demand and supply forces are out of equilibrium."

Compiler

PARTICIPATING PREFERENCE SHARE (*Industrial economics)

A share which in addition to the fixed dividend, earns bonus depending on the amount of profit is payable.

J.L. Hanson

A share which gets a fixed percentage and also further share in the profits if the profits exceed a certain limit.

K.K. Dewett

PARTICULAR EQUILIBRIUM ANALYSIS (*Theory of value)

Partial equilibrium analysis. An analysis of a single (only one) market at a time. This kind of analysis seeks to explain what happens in one particular market and ignores what is happening in others.

A.W. Stonier and D.C. Hague

(See also "Partial equilibrium analysis"—Compiler).

PARTNERS (*Industrial economics)

Individuals who constitute the partnership.

Compiler

PARTNERSHIP (*Industrial economics)

A form of business organisation.

Compiler

The relationship between persons who have agreed to share profits of business carried on by all or any of them acting for all.

Indian Partnership Act, 1932

PASSIVE BALANCE OF PAYMENTS (*International economics)

Negative or unfavourable balance of payments.

Compiler

PATENTS (*Industrial economics)

Valuable rights of the company that (rights) bring income to the company.

Raymond Bye

PATINKIN, DON (*History of economic thought)

An outstanding contemporary economist and a specialist in monetary economics. His celebrated work is *Money, Interest and Prices* (1956). He has introduced the concept of Pigou effect.

Compiler

PAY-AS-YOU GO (*Public finance)

Policy which means the prohibition of borrowing. It forces upon the fiscal authority the requirement of limiting current expenditures to current receipts.

P.E. Taylor

PAY-BACK METHOD (*Managerial economics)

A method of appraising the relative profitability of particular investment project.

The pay-back period is the length of time required for the initial investment to be recouped out of the annual cash flow (i.e. net profits after tax plus depreciation) produced by the investment. The method of calculating the pay-back period is:

$$\frac{\text{Initial investment}}{\text{Annual cash flow}}.$$

R.L. Varshney and K.L. Maheshwari

PAYEE (*Monetary economics)

The person to whom or to his order the money in the bill (of exchange) is to be paid.

A.K. Basu

The person to whom payment is to be made on a promissory note or bill of exchange.

W.W. Haines

PAYEE FOR HONOUR (*Monetary economics)

The person who pays a bill after protest for the honour of the person for whose account the bill is drawn.

A.K. Basu

'PAYMENTS PAR' SYSTEM OF EXCHANGE RATE (*International economics)

That system at which there will be no unwanted changes in the net liquid assets of all countries.

K.E. Boulding

PAY-ROLL (*Commerce)

Wage bill.

Compiler

PEACEFUL PICKETING (*Economics of labour)

Keeping away other workers when they are on strike.

Frederic Benham

PEAK TO TROUGH DISTANCE (*Business cycles)

Amplitude of the swings between prosperity and depression.

W.J. Fellner

PEASANT ECONOMY (*Agricultural economics)

Country whose mainstay is agriculture.

Ragnar Nurkse

PECUNIARY SOCIETY (*Monetary economics)

Money economy. Society in which values are measured and expressed in terms of monetary units.

L.V. Chandler

PEGGING (*International economics)

The most frequent form of intervention which is a broad method of exchange control. When intervention is practised with the object of keeping the currency up to a fixed exchange value, the currency is said to be pegged at that value. Pegging has usually meant *pegging up*. *Pegging-down* is maintaining the rate of exchange of a currency at a fixed undervaluation.

G. Crowther

Fixing the exchanges. A device by which a currency can be given artificially a higher purchasing power in some foreign market or markets than it possesses at home.

England adopted this method to stabilize her exchange with America from 1916 to 1919.

Briggs and Jordan

PENAL RATE (*Monetary economics)

When the bank rate is higher than the market discount rate, the bank rate at which the discount houses rediscount bills at the Central Bank or obtain advances, is called penal rate for it involves the discount houses in losses.

R.S. Sayers

The bank rate which is higher than the market rate. In this the rediscounting facility can be had from the Bank at a higher cost than the one ruling in the market.

A.K. Basu

PEOPLE'S PLAN (*Economics of planning)

The plan announced in 1943 (in India) by well known Communist leader Mr. M.N. Roy.

The plan which never came into operation, provided for the expenditure of Rs. 1500 crores spread over 10 years. Of Rs. 1500 crores, Rs. 5600 crores were to be spent on industry and Rs. 2950 crores on agriculture.

The plan envisaged that (i) India would be a democratic state, (ii) Land would be nationalised and rural indebtedness cancelled, (iii) there would be free and compulsory education for all, (iv) co-operatiue agriculture would be developed, (v) the state would supply to the citizens basic needs, (vi) there would be non-profit motivated production, (vii) cottage industries would be discouraged and emphasis would be given to large-scale industries which would be state-owned, and (viii) there would be regulated foreign trade.

Compiler

PERCENTAGE SYSTEM OF NOTE-ISSUE (*Monetary economics)

A method of note-issue. It prescribes that the gold reserves shall not fall below a fixed percentage of the notes issued.

Lord Keynes described it as the most fashionable system.

Compiler

PERENNIAL CANAL (*Agricultural economics)

The irrigational canal which contains a steady supply of water throughout the year. This is done by constructing a barrage across the river in such a way as to maintain the river water at a sufficiently high level so that there is always a steady supply of water in the canals.

Das and Chatterjee

PERFECT COMPETITION (*Theory of value)

Perfectly competitive industry. Perfect competition is a market situation in which (i) there are a large number of sellers (firms) and buyers, (ii) product is homogenous, (iii) there is free entry, (iv) there is perfect mobility of factors of production, (v) there are no transport charges, and (vi) there is perfect knowledge of market conditions on the part of both sellers and buyers.

Perfect competition does not exist in the real world, as all the above mentioned conditions are not fulfilled.

Compiler

Competition purged of every element of monopoly.

Cairncross

PERFECT COMPETITOR (*Theory of value)

One who can sell all he wishes at the going market price but is unable in any appreciable degree to raise or depress the market price.

P.A. Samuelson

PERFECT MARKET (*Theory of value)

Situation (condition) where all the potential sellers and buyers are promptly aware of the prices at which transactions take place and of all the offers made by other sellers and buyers and where any buyer can purchase from any seller and *vice versa*.

Frederic Benham

PERFECT MONOPOLY (*Theory of value)

Control by a single firm of a product for which there are no close substitutes.

Albert Meyers

A Market situation which is exactly the opposite of perfect competition.

In the real world there is neither perfect competition nor perfect monopoly but imperfect competition which assumes the forms of ordinary monopoly, duopoly, oligopoly and monopolistic competition.

Compiler

PERFECT OLIGOPOLY (*Theory of value)

A state of market in which a few firms sell homogeneous product.

K.E. Boulding

PERFECTLY COMPETITIVE INDUSTRY (*Theory of value)

An industry made up exclusively of numerous perfect competitors.

Sometimes economists use various synonyms for perfect competition (i.e. perfectly competitive industry): they often call it "pure competition" in contrast to impure or imperfect or monopolistic competition or they occasionolly call it "atomistic competition".

P.A. Samuelson

PERFECTLY DISCRIMINATING MONOPOLY (*Theory of value)

A situation in which different price is changed for *every* individual unit of a commodity.

A.W. Stonier and D.C. Hague

PERFECTLY ELASTIC DEMAND (*Theory of value)

It means that an infinite quantity would be purchased at the same price. It is also called elasticity of demand equal to infinity or infinite elastic demand.

Albert Meyers

Demand for a commodity is said to be perfectly elastic when a slight rise in its price causes the quantity demanded to fall to zero, and a slight fall in its price causes an infinite increase in quantity demanded.

Compiler

PERFECTLY ELASTIC SUPPLY (*Theory of value)

Supply of a commodity is said to be perfectly eleastic when a slight rise in its price causes an infinite increase in the quantity supplied; and a slight reduction in price causes the quantity supplied to fall to zero.

Compiler

PERFECTLY INELASTIC DEMAND (*Theory of value)

Demand for a commodity is said to be perfectly inelastic when even a substantial change (rise or fall) in price does not produce any change in the quantity demanded.

Compiler

PERFECTLY LIQUID ASSET (*Monetary economics)

Cash.

Compiler

PERMANENT PLANNING (*Economics of planning)

Planning which is not to be abandoned after some time. Its objectives are fixed in relation to a long period of time. Planning in the U.S.S.R., Czechoslovakia, Eastern Germany, Poland, China and India are examples.

B.C. Tandon

PERSONAL INCOME (*Economics of development)

The purchasing power individuals in the economy receive or income actually received by individuals.

W.W. Haines

National income minus:

(a) undistributed corporate profits,
(b) inventory valuation adjustment,
(c) corporate profits taxes,
(d) contributions for social insurance,
(e) wages accrued but not disbursed,

plus

(a) net interest paid by Government,
(b) Government transfer payments,
(c) business transfer payments.

Compiler

PERSONAL INSURANCE (*Insurance)

Insurance against loss of earning power arising through death, giving protection to the family or other dependents of the insured.

Raymond Bye

PERSONAL GET WEALTH (*Theory of value)

Gross possessions minus negative wealth. (negative wealth refers to debts which a person owes to others).

Alfred Marshall

PERSONAL SAVING (*Economics of development)

That part of income actually received that is not spent for taxes or consumption.

W.W. Haines

Difference between the current income and current expenses of the individuals, the current expenses including personal tax payments as well as consumption expenditures.

J.G. Gurley and E.S. Shaw

PERSONAL SERVICES (*Theory of value)

Immaterial utilities.

Kunt Wicksell

PERSONNEL MANAGEMENT (*Economics of labour)

That part of the management function which is primarily concerned with the human relationship within an organisation. Its objective is the

maintenance of those relationships on a basis which, by consideration of the well-being of the individual enables all those engaged in an undertaking to make their personal contribution to the effective working of that undertaking.

British Institute of Personal Management

That phase of management which deals with the effective control and use of manpower as distinguished from other sources of power. The methods, tools and techniques designed and utilised to secure the enthusiastic participation of labour represent the subject matter for study in personal administration.

Dale Yoder

Personnel management is that field of management which has to do with planning, organising and controlling various operative activities of producing, developing, maintaining and utilising a labour force in order that the objectives and interests for which the company is established are attained as effectively and economically as possible and the objectives and interests of labour itself are served to the highest degree.

M.J. Jucius

Personal administration is a code of the ways of organising and treating individuals at work so that they will each get the greatest possible realisation of their intrinsic abilities, thus attaining maximum efficiency for themselves and their groups and thereby giving to the enterprise of which they are a part, its determining competitive advantage and its optimum results.

Thomas Spates

Personnel management is the science of human engineering.

Edison

PESETA (*Monetary economics)
Currency unit of Spain.

Compiler

PESO (*Monetary economics)
Currency of Mexico, Argentina and Chile.

Compiler

PETTY, SIR WILLIAM (1623-87) (*History of economic thought)
The most important English mercantilist. He paved the ground for classical economics. He has been called by many such as Karl Marx the founder of political economy. He is also called the father of statistical method. By integrating economics and statistics, Petty became a pioneer in both the disciplines.

Sir William Petty held, "Labour is the father and active principle of wealth, as lands are the mother." Instead of using only comparative and superlative words and intellectual arguments, he expressed himself in terms of Number, Weight and Measure; used only arguments of sense and considered only such causes as have visible foundations in Nature.

His books include:

(1) *Discourse on Political Arthmetic* (1660),
(2) *A Treatise of Taxes and Contributions* (1662),
(3) *Verbum Sapienti* (1664),
(4) *Political Anatomy of Ireland* (1691),
(5) *Quantulum Cumque Concerning Money* (1695).

The son of a poor weaver in Hampshire, Petty had an extraordinarily varied career: cabin boy, hawker, seaman, clothier, physician, professor of anatomy, professor of music, surveyor, wealthy landlord, statistician, and economist.

Compiler

PHASES OF TRADE CYCLE (*Business cycles)

The upswing (prosperity phase, expansion), the upper turning point (downturn, crisis), the downswing (depression phase, contraction), the lower turning point (upturn, revival).

Gottfried Von Haberler

Expansion (upward movement), recession, contraction (downward movement), and recovery.

W.C. Mitchell

PHYSICAL CAPITAL (*Economics of development)

The physical environment which is necessary for the enjoyment of particular satisfactions.

Arthur Lewis

PHYSICAL LAW (*General economics)

Law of a natural science such as physics.

Compiler

PHYSICAL PLANNING (*Economics of planning)

As distinguished from financial planning, it refers to the allocation of real resources such as labour, machinery, raw materials etc., and how best it can be changed so as to realise certain fixed target. It is an attempt to work out the implications of the development effort in terms of factor allocations and product yields so as to maximise income and employment.

Indian Planning Commission

In the case of physical planning, an overall assessment of the real resources is made while in financial planning, the plan outlay is fixed in terms money. Both are to be integrated to achieve the best results.

Compiler

PHYSICAL SCIENCE (*Sciences)

A science which deals with the physical universe. Examples: Astronomy, biology, geology, chemistry and physics.

G.W. Forster and M.C. Leager

PHYSIOCRACY (*History of economic thought)

The body of economic theory which developed in France in the 18th century. It emphasised agriculture.

Produit net (net product) was its central point.

Eric Roll

Dupont de Nemours, a French writer who first used the term 'Physiocracy' in 1768 defines it as, "the science of the natural order. Natural order may be conceived as a state of nature in opposition to a civilized state regarded as an artificial creation. Property, security and liberty constitute the whole of the social order." Physiocracy which signifies the rule of nature was revolt to the mercantilism.

Compiler

PHYSIOCRATS (*History of economic thought)

The term refers to a group of French thinkers who about the middle of the 18th century, developed a system of economic thought which forms one of the important roots of modern economics. The prominent Physiocrats are: Francois Quesnay (1694-1774), Victor Riquetti, Narquis de Mirabeau (1715-89), Anne Robert Jacques, Baron de Turgot (1727-81), and Mercier de la Riviere. Their system of economic thought is known as physiocracy which Adam Smith called "The Agricultural System". The Physiocrats liked best call themselves *des Economistes* (the economists).

The Physiocrats believed in 'natural order' and the laws of nature. They emphasised individualism. Their well-known maxim is "*Laissez-faire, laissez-passer*"—that is let things alone, let them take their course. The only function of the state, according to the Physiocrats, is to protect life, liberty and property. Their maxim is "poor Peasants, poor Kingdom, poor Kingdom, poor King." They held that only agriculture and other extractive industries were able to increase the wealth of the nations. They introduced the concept of surplus emanating from the bounty of nature. They called this surplus *produit net* or net product. To them commerce and manufactures were unproductive.

Adam Smith praised the physiocracy "with all its imperfections" as "perhaps the nearest approximation to the truth that has yet been published upon the subject of Political Economy."

Compiler

PIE CHART (*Statistical methods)

Circle chart.

Compiler

PIECE RATES (*Economics of labour)

A system where the employee receives a fixed payment for a definite measurable amount of work.

J.L. Hanson

Also called piece-work wage, it is the reward to the worker according to his individual output.

Raymond Bye

PIGOU, ARTHUR CECIL (1877-1959) (*History of economic thought)

Father of the welfare economics. A.C. Pigou, "the true inheritor of Marshall's mantle" was educated at Harrow and King's College where he was elected Fellow in 1922. In 1908, he succeeded Alfred Marshall to the chair of Political Economy at the Cambridge University and held the prestigious post until his retirement in 1944. He played an active role in public life which earned him a wide reputation outside the economic circles. He was a member of the Committee on Currency and Foreign Exchanges (1918-19), of the Royal Commission on Income Tax (1919-20) and of the Committee on Currency and Bank of England Note Issues (1924-25).

Pigou, a prolific writer, brought out the following important publications:

(1) *Principles and Methods of Industrial Peace* (1905),
(2) *Wealth and Welfare* (1912),
(3) *The Economics of Welfare* (1920).
This is the expansion of *Wealth and Welfare.*
(4) *Essays in Applied Economics* (1923),
(5) *Industrial Fluctuations* (1927),
(6) *A Study in Public Finance* (1928),
(7) *The Theory of Employment* (1933),
(8) *Economics of Stationary State* (1935),
(9) *Socialism Vs. Capitalism* (1937),
(10) *Employment and Equilibrium* (1941),
(11) *Lapses from Full Employment* (1945),
(12) *The Veil of Money* (1950),
(13) *Essays in Economics* (1952),
(14) *Alfred Marshall and Current Thought* (1953).

Of these, *The Economics of Welfare* is his masterpiece. It was the first scientific treatise on welfare economics. "Welfare economics began with Pigou. Before that, we had Happiness Economics, and before that Wealth Economics." (I.M.D. Little). His economics is known as old welfare economics as opposed to new welfare economics which was designed by economists like J.R. Hicks, P.A. Samuelson, Lionel Robbins, R.F. Harrod, Abraham Bergson, Nicholas Kaldor and Harold Hotelling'. ("Welfare economics is concerned with the conditions which determine the total economic welfare of a community"—Oscar Lange).

A.C. Pigou, confined his study to economic welfare which he defined as "that part of social welfare that can be brought directly or indirectly into relation with the measuring rod of money." However, he admitted that economic welfare was not the index of total welfare.

To him economic welfare of the community and national dividend were co-ordinate in that the former was proportionate to the latter. Economic welfare of the community increases, he held, when the purchasing power is transferred from the rich to the poor. He wrote: "The economic welfare of a community of a given size is likely to be greater, the larger is the share that accrues to the poor."

Pigou maintained that economic welfare is increased when fair competition is allowed among industries operating under the laws of decreasing and constant returns. He pleaded for state intervention in the case of industries operating under increasing returns so that economic development is caused. To reduce economic disparities, he suggested graduated income-tax, death duties and nationalisation of important industries by degrees.

He defined national income as "that part of the ōbjective income of the community, including of course, income derived from abroad, which can be measured in money."

Pigou defined the concepts of MPNP and MSNP, thus: The marginal private net product (MPNP) is "that part of the total net product of physical things or objective services due to the marginal increment of resources in any given use or place which accrues in the first instance i.e., prior to sale—to the person responsible for investing resources there" while marginal social net product (MSNP) is "the total net product of physical things or objective resources due to the marginal increment of resources in any given use or place, no matter to whom any part of this product may accrue."

Pigou, a utilitarian, held that interpersonal comparison of utility and cardinal measurement of utility were possible. His analysis of income distribution was this: ". . . . while in general and apart from special exceptions, anything which either increases the dividend without injuring the absolute share of the poor, or increases the absolute share of the poor without injuring the dividend must increase economic welfare, the effect

upon economic welfare, of anything that increases one of these quantities but diminishes the other is ambiguous."

According to Pigou, industrial fluctuations are more psychological. They take place on account of shifts in the real demand schedule for labour which is mainly caused by expectations regarding prospective yields i.e. waves of over-optimism and over-passimism. Industrial fluctuations are more common and violent in the capital goods industries than in consumer goods industries.

Pigou, albeit a capitalist, favoured socialism for solving the problem of unemployment. He preferred public ownership to public control. He recommended partial socialization rather than authoritarian socialism.

Pigou is one of the best exponents of mathematical method.

Pigou gave the concept of equilibrium firm which "implies that there can exist someone firm, which, whenever the industry as a whole is in equilibrium in the sense that it is producing a regular output Y in response to a normal supply price P will itself individually be in equilibrium with a regular output X."

Referring to the significance of money, Pigou remarked, "industry is closely enfolded in a garment of money." He is one of the originators of the cash balance version of the quantity theory of money. He stated the theory in the equation: $P = \frac{kR}{M}$, later on he modified it as:

$$P = \frac{kR}{M} \left\{ c + h\ (1 - c) \right\}$$

There is what is known as Pigou Effect also called Real Balance Effect. It refers to Pigou's controversy with Keynes in which he (Pigou) tried to show that a fall in the price level by increasing the real worth of cash balances might, by inducing the wealth-holders to increase their consumption spending, help in raising the level of the aggregate demand to full employment level.

Pigou argued that wage-cuts would bring about full employment in the economy.

Pigou's name will remain for ever in history of economic thought, and his influence will be ever found in matters of economic policies of the governments.

Compiler

PIGOU EFFECT (*Monetary economics)

Also known as real balance effect, it refers to the statement that an overall reduction in prices leads to increased spending on commodities and services.

Compiler

The terms Pigou effect or real balance effect were coined by Don Patinkin in "Price Flexibility and Full Employment", A.E.P., 1948. It means, individuals who possess money balances will feel worse off when prices rise, and better off when prices fall because of the change in the real value of their money.

F.S. Brooman

PLACE UTILITY (*Theory of value)

Utility that a good possesses because of its location.

Compiler

PLAN (*Economics of planning)

In general and not only in economics, a plan, in our sense, consists of the totality of arrangements decided upon in order to carry out a project.

Bettelheim

PLANNED ECONOMY (*Economics of planning)

A scheme of economic organisation in which individual and separate plants, enterprises and industries are treated as co-ordinate units of one single system for the purpose of utilising available resources to achieve the maximum satisfaction of the people's needs within a given time.

Lewis Lordwin

An economy such as that of the U.S.S.R. where all economic activities are controlled by the state.

A.W. Stonier and D.C. Hague

A more recent variety of socialism.

Ludwig Von Mises

PLANNING (*Economics of planning)

Economic planning. (*See* economic planning).

Compiler

PLANNING BY DIRECTION (*Economics of planning)

A system of wholesale centralised planning where there is complete non-existence of private economy.

A.B. Bhattacharya

A system in which the planning authority assumes complete charge of the economy and directs it to achieve the desired objective. It is the opposite of "planning by inducement."

Compiler

PLANNING BY INDUCEMENT (*Economics of planning)

Sir Arthur Lewis, the 1979 Nobel prize winner in Economics, distinguishes between two methods of planning: (i) Planning by inducement and (ii) Planning by direction.

Planning by inducement is a system in which there exists the private enterprise in the entire economic field but it is subject to the control and regulation of the state or the planning authority.

Compiler

PLANNING COMMISSION OF INDIA (*Economics of planning)

The extra-constitutional permanent advisory body set up by a resolution of the Government of India dated March 15, 1950. It is enjoined "to promote a rapid rise in the standard of living of the people by exploitation of the resources of the country, increasing production, and offering opportunities to all for employment in the service of the community. Its functions are:

(1) "to make an assessment of the material, capital and human resources of the country. . . ."

(2) to formulate a plan for the most effective and balanced utilization of the country's resources;

(3) on a determination of priorities, to define the stages in which the plan should be carried out;

(4) to indicate the factors which are tending to retard economic development and determine the conditions of successful execution of the plan;

(5) to appraise from time to time the progress achieved in the execution of each stage of the plan. . . .;

(6) to make interim recommendations. . . ."

The resolution says: "the planning commission will make recommendations to the cabinet. In framing its recommendations, the planning commission will act in close understanding and consultation with the Ministries of the Central Government and the Governments of the States. The responsibility for taking and implementing decisions will rest with the central and the state Governments".

The planning commission is located in Yojana Bhavan in New-Delhi. The Prime Minster of India is its ex-officio chairman. Deputy chairman of the planning commission, who enjoys the rank of a cabinet minister is the *de facto* chief of the commission. Besides there are (four) members and a secretary. These high official are assisted by hundreds of staff members. Mr G.L. Nanda was the first Deputy Chairman as well as Minister of Planning.

Since April 1, 1951, till now (1984) five 5-year plans and three annual plans are over. The current sixth plan is scheduled to end on March 31, 1985.

Compiler

PLANNING CURVE (*Theory of value)

A term employed by J.A. Schumpeter. It refers to the cost curve that would confront a new firm (considering to enter an industry) before it starts.

It is Edward Chamberlin's cost curve.

Albert Meyers

PLANNING WITH A PURPOSE (*Economics of planning)

When objectives of the plan are fully achieved, planning may be said to be "planning with a purpose".

A.B. Bhattacharya

PLANT (*Theory of value/Industrial economics)

The physical equipment of the production unit.

A. Murad

The physical equipment of buildings, offices, furnishings, machinery, tracks and the like assembled together for producing a single product or a group of related products.

Raymond Bye

A group of buildings and other more or less fixed physical equipment that are used together in production.

G.L. Bach

PLANTATION CROPS (*Agricultural economics)

As distinguished from food crops and cash crops, they include tea, coffee, rubber, cinchona etc.

Compiler

PLATO (427-347 B.C.) (*History of economic thought)

World-famous Greek philosopher and pupil of Socrates. His greatest work is *The Republic* which contains many economic ideas.

He held economics to be the handmaid of ethics and politics. He wrote, "A state arises out of the needs of mankind; no one is self-sufficing, but all of us have many wants." In his scheme, division of labour is the basis of social organisation. He advocated communism.

Compiler

PLEASURE ECONOMY (*Economics of development)

Prof. Patten distinguishes between 'pleasure economy' and 'pain economy'.

Pleasure economy is an economic stage when first elemental wants have been attended to and positive enjoyment begins: when food is appetising as well as sufficient, when clothing and houserooms are attractive.

F.W. Taussig

PLUTOLOGY (*General economics)

A name applied to economics by Hearn. It means the science of wealth.

Compiler

POCKET BOOK MONEY (*Monetary economics)

Common money in the strictest sense of the term.

G.N. Halm

POLICE STATE (*Economics of development)

A state in which everyone is spied upon by his neighbours and colleagues, or even by his children and in which the unguarded world or the ill-considered action may lead to imprisonment or death.

Frederic Benham

As opposed to welfare state, it refers to a state where protection and not promotion is the only concern of the government.

Compiler

POLITICAL ECONOMY (*General economics)

It is the study of the principles on which the resources of a community should be so regulated and administered as to secure the communal ends without waste.

P.H. Wicksteed

The old name of Economics. The name was first invented and employed about the beginning of the 17th century by Antoine de Montchretien. Adam Smith used this term.

C. Gide and C. Rist

This older term can perhaps be best defined by literal translation as state house-keeping. It could be thought of as being primarily a body of maxims for statesmen.

D.H. Robertson

A branch of statecraft.

Adam Smith

The first name of economics. It was in vogue for about a hundred years.

Compiler

POOR COUNTRY (*Economics of development)

Underdeveloped country: The term suggests that a country ought to be developed or is capable of being developed.

G.M. Meier and R.E. Baldwin

POOR LAWS (*Economics of development)

A system of poor relief adopted by England. The Classicists opposed it on the ground that it would promote irresponsiblity and a tendency towards large family size.

Compiler

POPULATION POLICY (*Demography)

It may be defined as a conscious endeavour to spell out the basic objectives and the means to achieve them, legal or otherwise, so that the size and composition of the growth of human resources are so affected as to lead to higher economic growth and improved per capita income levels.

Braj Kishor and B.P. Singh

POPULATIONIST (*Demography)

Opponent of Malthusian theory of population.

Compiler

POSITIVE CHECKS (*Demography)

Repressive, natural checks like war, epidemics, droughts, floods etc. referred to by Malthus in his theory of population. These checks are those that increase death rate.

Compiler

POSITIVE ECONOMICS (*General economics)

Scientifiic economics, law establishing economics.

W.J. Fellner

Also called economic theory or economic analysis, it is a study of economic things as they are. It is a study of economic laws, principles and theories. It is the opposite of normative economics.

Compiler

POSITIVE FISCAL POLICY (*Public finance)

We mean by it the process of shaping public taxation and public expenditure so as (i) to help dempen to swings of the business cycle, and (ii) to contribute towards the maintenance of a growing, high-employment economy free from excessive inflation or deflation.

P.A. Samuelson

POSITIVE RATE OF TIME PREFERENCE (*Theory of value)

Preferring to have an equal amount of goods and services in the present rather than in the future or preferring to have an equal amount of goods and services in the near future than in the distant future.

Albert Meyers

POSITIVE SCIENCE (*Economics)

A body of systematised knowledge concerning what is.

J.M. Keynes

POSITIVISM (*Economic methodology)

Explaining observed phenomena by empirically testable hypotheses.

W.J. Fellner

POSTAL SAVINGS BANK (*Public finance)

It is not a bank in the true sense of the term. It is more or less a department of the Government.

A.K. Basu

POTENTIAL DEMAND (*Theory of value)

Desire for a thing as opposed to actual demand.

Compiler

POTENTIAL OUTPUT (*Economics of development)

What a nation can produce as distinguished from what a nation actually produces.

Compiler

POTENTIAL SUPPLY (*Theory of value)

The quantities of goods that dealers would be willing to sell only at higher prices than those prevailing at the moment.

Albert Meyers

POWER OF POPULATION (*Demography)

The tendency of population to increase in the geometrical progression like 1, 2, 4, 8, 16, 32, 64, 128, 256, and so on.

Frederic Benham

PRACTICAL ECONOMICS (*General economics)

The term used by L. Cossa for applied economics. It is a study of the method or means of realising economic ideals.

M.L. Seth

PREBISCH, RAUL (*History of economic thought)

An internationally reputed and influential economist. He was the first Director-General of the United Nations Conference on Trade and Development (UNCTAD) (1964).

Compiler

PRECAUTIONARY MOTIVE (*Monetary economics)

The demand for money for precautionary motive arises from the need for meeting unforseen emergencies which will involve outlays greater than those involved in the usual anticipated transactions.

Dudley Dillard

The desire to hold sufficient funds to meet unexpected expenditures.

W.W. Haines

The desire for security as to the future cash equivalent of a certain proportion of total resources.

J.M. Keynes

A motive to liquidity preference as conceived by J.M. Keynes. It refers to the desire to hold cash for sudden emergencies or liabilities and to take advantage of unforeseen opportunities of advantageous purchase.

J.A. Estey

PREFERENCE SHARE (*Industrial economics)

A share which has usually a fixed rate of dividend and its holder is paid in full before the ordinary share-holders receive anything.

J.L. Hanson

Midway between the bond and the ordinary share comes a class of security known as the preference share. This has something of the character of a bond in that it represents an obligation of the issuer to pay not more than a stated sum each year. If however, the profits of issuing company do not justify this payment, it does not have to be made and in this sense it is like an ordinary share.

K.E. Boulding

PREFERENTIAL TREATMENT (*International economics)

Making discrimination in the rate of duties with regard to different countries.

K.K. Dewett

PREMIUM BONUS SYSTEM (*Economics of labour)

A type of bonus systems.

This is a payment by results. Under which the reward for increased work starts high, but afterwards does not increase proportionately with the work done. This automatically scales down the rate as output of individual worker increases. This system is based on a "standard time" for a given job with a bonus for time saved.

(Other systems are: Task bonus, Gantt, Emerson, Taylor and Bedaux).

Maurice Dobb

PREVENTIVE CHECKS (*Demography)

Checks to be applied by man i.e. birth-rate reducing checks.

W.J. Fellner

They are the opposite of positive checks.

Compiler

PRICE (*Theory of value)

Value expressed in terms of money.

F. Benham, Alfred Marshall, D.H. Robertson

The rate at which a commodity can be exchanged for anything else.

A.W. Stonier and D.C. Hague

The value of a commodity measured in terms of a standard monetary unit.

Albert Meyers

The amount of money that would be given in exchange for one unit of it.

Fairchild, Buck and Slesinger

The ratio of a number of monetary units to a related quantity of some physical good.

K. Boulding

PRICE CONSUMPTION CURVE (*Theory of value)

Curve which shows the way in which consumption varies, when the price of the commodity (X) varies and other things remain the same.

J.R. Hicks

PRICE COMPENSATING VARIATION (*Theory of value)

One of four consumers surpluses propounded by J.R. Hicks, the other three being price equivalent variation, quantity compensating variation and quantity equivalent variation.

Compiler

PRICE CONTROL (*Theory of value)

Regulation of the consumer price.

Compiler

PRICE DEMAND (*Theory of value)

The quantity of a good, a consumer would buy at a time in a given market at different hypothetical prices, other things remaining the same.

Compiler

PRICE DISCRIMINATION (*Theory of value)

Setting of two or more prices for an identical commodity.

OR

Selling of technically similar products at prices which are not proportional to marginal costs.

G.J. Stigler

The act of selling the same article, produced under a single control, at different prices to different buyers.

Joan Robinson

The practice of selling or buying in different quantities to or from different buyers or sellers at different prices.

K.E. Boulding

It is also called discriminating monopoly.

Compiler

PRICE EFFECT (*Theory of value)

It is a combination of an income effect on the one hand and a substitution effect on the other. It is possible that prices may change, with money income constant so that the consumer is made either better or worse off. In this situation the consumer will not only have to rearrange his purchases as under substitution effect, but his "real income" will change too. There will thus be an income effect also and this will make the consumer better or worse off as the case may be. The result of this kind of change in conditions is described as a price effect.

A.W. Stonier and D.C. Hague

PRICE ELASTICITY OF DEMAND (*Theory of value)

Ordinary elasticity of demand as distinguished from income elasticity of demand and elasticity of substitution.

It refers to the ratio of relative change in the quantity demanded to the relative change in the price of the good.

Compiler

Price elasticity of demand is made up of income elasticity of demand and elasticity of substitution.

K.T. Ramakrishna

PRICE INDEX (*Statistics)

An arithmetical number which indicates the price level at any given time as compared with the level of prices at some standard date called the base period.

Compiler

PRICE LEADERSHIP (*Theory of value)

A situation in which one or more large firms base their price and output policies upon the assumption that these policies will directly affect their own returns.

Albert Meyers

PRICE LEVEL (*Monetary economics)

The price of a composite commodity which is representative of some type of expenditure.

J.M. Keynes

PRICE LINE (*Theory of value)

Also called price opportunity line, price-income line and budget line, it shows all possible combinations of two goods that the consumer can buy if he spends the whole of his given sum of money on his purchases at the given prices.

K.K. Dewett

PRICE MECHANISM (Theory of value)

The mechanism by which prices adjust themselves to the pressure of demand and supply and in their turn operate to keep demand and supply in balance.

A.K. Cairncross

PRICE OF CREDIT (*Monetary economics)

Interest rate.

Gottfried Von Haberler

PRICE OF LABOUR (*Economics of labour)

Wages.

Gottfried Von Haberler

PRICE OF MONEY (*Monetary economics)

Interest rate.

Dudley Dillard

PRICE OPPORTUNITY LINE (*Theory of value)

Price line.

Compiler

PRICE POINT REGULATION (*Agricultural economics)

An attempt only to enforce a single fixed price of any commodity.

Raj Krishna

PRICE RANGE REGULATION (*Agricultural economics)

An attempt only to impose some upper and lower limits on the movement of market prices.

Raj Krishna

PRICE SPECIE FLOW MECHANISM (*Monetary economics)

The mechanism which ensures automatic functioning of the gold standard.

Compiler

PRICE SUPPORT (*Agricultural economics)

Regulation of the producer price.

Compiler

PRICE THEORY (*Economics)

Two main branches of modern economic theory are price theory and income theory. Another name for price theory is micro-economics. It explains the composition or allocation, of total production—why more of some things are produced than of others......In the 18th and 19th centuries it was known as the theory of value. Many versions of the modern price theory were constructed by Alfred Marshall. Other prominent economists who have added to and modified the corpus of price theory are Mrs. Robinson, Edward Chamberlin and J.R. Hicks.

D.W. Watson

PRICING SYSTEM (*Theory of value)

The unconscious "planning" mechanism which guides private individuals, in pursuit of maximum individual rewards; to allocate economically and fully the total resources of the economic system.

Dudley Dillard

Price system is a system of economic organisation in which each individual including in that term, legal individuals such as corporations, decides for himself what contribution he will make to the economy with the understanding that he can sell that contribution at a price acceptable to him and the buyer and that he can obtain the goods and services contributed by other individuals only at prices acceptable to them.

Robert Dorfman

PRIMARY DEPOSITS (*Monetary economics)

The deposits which result from the actual deposit of cash or its equivalent,

Dudley Dillard

Passively created money.

Deposits arising from the actual deposit of cash in a bank.

G.N. Halm

Prof. C.A. Phillips coined the terms, "primary deposits" and "derivative deposits".

J.M. Keynes

PRIMARY EMPLOYMENT (*Keynesian economics)

(Following the terminology of R.F. Kahn), the employment caused directly by the Government expenditure (including the amount of those who manufacture the materials the Government purchases).

Albert Meyers

PRIMARY EXPENDITURE (*Public finance)

It consist of all expenditures which Governments are obliged to undertake as for example defence, law and order within the country.

Andley and Sundharam

PRIMARY FACTORS OF PRODUCTION (*Theory of value)

Land and labour.

Compiler

PRIMARY PRODUCTION (*Economics of development)

As opposed to secondary and tertiary production, it refers to agriculture, forestry and fishing.

G.M. Meir and R.E. Baldwin

PRIMARY STRIKE (*Economics of labour)

Strike called by a group of workers because of disagreement with their own employer over their own terms of employment.

Fairchild, Buck and Slesinger

PRIME BILL (*Monetary economics)

That carrying the endorsement.

G. Crowther

PRIME COSTS (Theory of value)

Variable costs plus those fixed costs (such as office expenses) which must be covered to continue producing.

Frederic Benham

Costs which need not be incurred if no output is produced (for instance the cost of labour, raw material, power etc.).

Joan Robinson

Variable costs as distinguished from fixed or supplementary costs.

Compiler

PRINCIPLE OF ACCELERATION (*Business cycles)

A type of over-investment theory which states that changes in the production of consumer goods give rise, for technological reasons, to much more violent fluctuations in the production of producer' goods in general and fixed capital equipment in particular. This version of over-investment theory has been elaborated by Aftalion, Bickerdike, Carver, Pigou etc.

[See "Accelerator"—Compiler.]

Gottfried Von Haberler

PRINCIPLE OF (THE) BEST ALTERNATIVE (*Theory of value)

The general principle governing exchange and specialisation.

It may be roughly stated thus : In his endeavour to obtain the commodities he desires, an individual has two alternatives. He can either produce the commodities for himself directly or he can produce some other commodity and exchange it for what he wants. Which alternative he will choose will depend on which is the easier way of getting the commodity he wants, for it is the easier way that he will follow.

K. Boulding

PRINCIPLE OF CAPACITY TO PAY (*Economics of labour)

A principle of fixing minimum wages.

The term (traditionally) has been understood to mean one of the following:—

(a) the capacity of all industries (in a given country) to pay;
(b) the capacity of a particular industry to pay; and
(c) the capacity of a particular (Production or commercial) unit (firm) to pay.

Maurice Dobb

PRINCIPLE OF COMPARATIVE COSTS (*International economics)

The principle states that a country gains by concentrating its energies in the production of those goods in which it has the greatest and comparative advantage or in which it has the least comparative disadvantage.

Fairchild, Buck and Slesinger

PRINCIPLE OF CONSUMER SOVEREIGNTY (*Theory of value)

It states that the determination of which goods and services are to be produced is really made in the final analysis by the consumer himself,

The fundamental decisions which run the economy are made by millions of individual consumers shopping in the market places.

Allen, Buchanan and Colberg

PRINCIPLE OF DEVELOPING TALENT (*Economics of development)

An ethical proposition made by Raymond Bye for just distribution of social income and reduction of inequalities of income.

Compiler

The principle may be stated thus: The capacities for useful achievement that are latent in individuals should be discovered and developed.

Raymond Bye

PRINCIPLE OF DIFFERENT USES (*Theory of value)

It may be stated thus:

If the price of a commodity is high, its use will be restricted to those purposes for which the purchasers consider it most important, and the effective demand will then be relatively small; but if the price is low, consumers will employ it for less important uses and then the effective demand will then be greater.

Raymond Bye

PRINCIPLE OF DIFFERENTIAL CHARGING (*Economics of transport)

Also known as principle of charging what the traffic will bear, it is one of the different princples of determination of railway rates and fares.

According to it, such rates should be charged as in the aggregate yield a revenue to cover all expenses; and leave a fair return on the capital at charge. In other words "rail-road rates must be such as will move the traffic and attract and retain it on the railroads."

S.K. Srivastava

PRINCIPLE OF DIMINISHING MARGINAL PRODUCTIVITY
(*Theory of value)

The law of diminishing returns. In its general form, after a certain point has been reached in the utilisation of one or more productive factors of fixed amount, additional application of the other co-operative factor or factors, though increasing the total product, will not increase it in proportion to the increase of the variable factor or factors.

Fairchild, Buck and Slesinger

The principle of diminishing productivity or the law of variable proportions states that in a given state of arts, after a certain point is reached, the application of further units of any variable factor to another fixed factor (or fixed combination of factors) will yield less than proportionate returns,

J.M. Cassels

PRINCIPLE OF DIMINISHING MARGINAL RATE OF SUBSTITUTION (*Theory of value)

The new terminology used by J.R. Hicks for the law of diminishing marginal utility.

Compiler

PRINCIPLE OF DIMINISHING MARGINAL UTILITY (*Theory of value)

Law of diminishing marginal utility.

Compiler

PRINCIPLE OF DIMINISHING RETURNS (*Theory of value)

Law of diminishing returns. It is also called the law of diminishing productivity or the law of the returns or the law of non-proportional returns or the law of variable proportions or the law of proportionality.

Anatol Murad

PRINCIPLE OF EFFECTIVE DEMAND (*Keynesian economics)

It states that employment depends on the sum of consumption expenditures and investment expenditures.

It explains the paradox of poverty in the midst of potential plenty which is one of the grave contradictions of capitalism.

Dudley Dillard

PRINCIPLE OF EQUAL PAY FOR EQUAL WORK (*Economics of labour)

Mrs. Sydney Webb has given three possible interpretations of this principle:

(1) Equal pay for equal effort and sacrifice,
(2) Equal pay for equal product,
(3) Equal pay for equal value to the employer.

Maurice Dobb

PRINCIPLE OF EQUI-MARGINAL RETURN (*Theory of value)

Law of equi-marginal utility.

It states that man tends to shift and adjust his resources and energies between different uses in such a way as to get the greatest total benefit from them.

D.H. Robertson

PRINCIPLE OF EQUITY (*Public finance)

It declares: "Different persons should be treated similarly unless they are dissimilar in some relevant respect."

In its theoretical and barest form, "Similar persons should be treated similarly."

A.C. Pigou

PRINCIPLE OF GROWTH (*Economics of development)

In a growing economy, with the passage of time more of one good may be obtained together with more other goods.

Havens, Henderson and Cramner

PRINCIPLE OF (A) GUARANTEED MINIMUM (*Economics of development)

Raymond Bye's ethical proposition. It states: The basic requirements for all should be met before luxuries are allowed to any.

Compiler

PRINCIPLE OF INCENTIVE (*Economics of development)

An ethical proposal made by Raymond Bye.

He states it thus: Rewards should vary with the socially useful productive accomplishments of the individual.

Compiler

PRINCIPLE OF LIMITED LIABILITY (*Industrial economics)

It states that the liability of shareholder is limited to the fully paid up value of the shares which he holds and if the company should find itself in difficulties and unable to meet the demands of its creditors, the shareholder may lose this but no further amount, and the rest of his property, is free from any claims by the company's creditors.

J.L. Hanson

PRINCIPLE OF LIVING WAGE (*Economics of labour)

It states that wages should be equal to "a sum sufficient for the normal and reasonable needs of the average worker with an average family in the locality."

Quoted by A.B. Das and M.N. Chatterji

PRINCIPLE OF MAXIMUM SOCIAL ADVANTAGE (*Public finance)

It was propounded by Hugh Dalton of England.

Compiler

It may be stated thus:

Public expenditure in every direction must be carried just so far that the advantage to the community of a further small increase in any direction is just balanced by the disadvantage of a corresponding small increase in taxation and in receipts from any other source of public income. This gives the ideal of both of public expenditure and of public income.

Hugh Dalton

Expenditure should be pushed in all directions up to the point at which satisfactions obtained from the last shilling expended is equal to the satisfaction lost in respect of the last shilling called up on Government service.

A.C. Pigou

PRINCIPLE OF MINIMUM DIFFERENTIATION (*Theory of value)

This principle deserves to be called Hotelling's Law as it was first formulated clearly by Harold Hotelling in 1929.

It refers to the making of a product, in monopolistic competition, more like the other product but not so much alike that no one can tell the difference.

K.E. Boulding

PRINCIPLE OF OPPORTUNITY COSTS (*Theory of value)

It states that the use of any factor in production involves a cost which is equal to the prices offered for that factor in its possible alternative uses.

Raymond Bye

PRINCIPLE OF SOCIAL SURPLUS (*Welfare economics)

It is suggested by Raymond Bye. He says: "Surplus income should be used for purposes that will contribute to the common welfare."

Compiler

PRINCIPLE OF SUBSTITUTION (*Theory of value)

It refers to interchange of one factor of production with another in the attempt to secure the least possible cost for the given output.

Fairchild, Buck and Slesinger

PRINCIPLE OF ZONAL CHARGING (*Economics of transport)

One of the principles of railway rates determination.

According to this, the area served by a railway is divided into several zones; and within one zone, charges are the same irrespective of distance travelled and if the traffic moves a little distance into another zone, it will have to pay full charges for the next zone.

S.K. Srivastava

PRIVATE CAPITAL (*Theory of value)

As opposed to social capital, it is some times defined as acquisitive capital because it yields revenue to the owner but it does not necessarily increase the national income either in a real or social sense.

Briggs and Jordan

PRIVATE COST (*Theory of value)

In contrast to social cost, the term alludes to the cost to the individual.

Briggs and Jordan

PRIVATE ENTERPRISE ECONOMY (*Economics of development)

Capitalism.

Compiler

PRIVATE GOODS (*Theory of value)

Goods that belong to private individuals.

Compiler

PRIVATE SECTOR (*Economics of development)

The sector which is wholly controlled, financed and managed by the individual entrepreneurs.

The construction industries, and certain consumer goods industries fall in this category.

Compiler

PROBABILITY (*Statistics)

If an action can have any one of n equally likely results and if r of these results produce an event E and the remainder do not produce E, then the probability or chance of E is defined to be $P(E)=r/n$.

B.C. Brookes and W.F.L. Dick

PROBLEM (*Economics of development)

A situation that arises about which there is some doubt or uncertainty as to the course of action to be taken.

G.W. Forster and M.C. Leager

PROCEED (*Industrial economics)

Sale receipt.

Dudley Dillard

PROCESS (*Economics of development)

Operation of certain forces.

G.M. Meir and R.E. Baldwin

PROCESSING (*Agricultural/Industrial economics)

The act or a series of acts by which a product is converted into a more usable form.

G.W. Forster and M.C. Leager

PRODUCED GOODS (*Theory of value)

As opposed to original goods, goods which have been created by the activity of man.

K.E. Boulding

PRODUCED MEANS OF PRODUCTION (*Theory of value)

Capital goods.

Compiler

PRODUCER (*Theory of value)

Seller, entrepreneur, firm.

Compiler

PRODUCER GOODS (*Theory of value)

The goods which satisfy human wants indirectly by contributing towards the production of the first class of goods.

They may also be called instrumental goods or intermediate goods.

Alfred Marshall

Capital goods or investment goods. These are the goods that satisfy wants only indirectly such as factories, machinery, railways, lorries and raw materials.

Frederic Benham

All goods existing at any moment which are not consumers' goods, that is to say, all goods which are directly or indirectly used in the production of consumers' goods, including, therefore, the original means of production as well as instrumental goods and all kinds of unfinished goods.

F.A. Von Hayek

PRODUCER-GOODS MARKET (*Theory of value)

Market where the entrepreneurs exchange money (obtained from consumers) for the use of productive resources (including land, labour and capital) which they require to produce the consumers' goods.

G.J. Stigler

PRODUCER PRICE (*Theory of value)

The prices which the producer receives.

Raj Krishna

PRODUCT DIFFERENTIATION (*Theory of value)

Any situation that induces a buyer to be willing to pay more for a good bought from one seller rather than from another, or as any consideration that causes one dealer to be preferred to another as a seller of a good even though the price is the same with both sellers.

A.L. Meyers

It means that products are different in some ways but not altogether so.

A.W. Stonier and D.C. Hague

Product differentiation, an innovation of Edward Chamberlin, is the chief characteristic of monopolistic competition which is also a "creation" of Chamberlin.

Compiler

PRODUCTION (*Theory of value)

Creation of utilities i.e. want-satisfying power, in economic goods.

Raymond Bye

Any activity that results in goods or services. In common speech, it is synonymously used with manufacturing.

A.L. Meyers

The addition of want-satisfying power to goods or the rendering of services that satisfy human wants that people are willing to pay to satisfy.

G.L. Bach

Completely stated, production consists of (a) the production of wealth which is defined as the creation of utility in wealth, and (b) the rendering by free persons of direct personal services.

Fairchild, Buck and Slesinger

All processes necessary to bring goods into the hands of the consumers.

F.A. Von Hayek

The process of adding to the total inventory of stock.

K.E. Boulding

PRODUCTION COEFFICIENTS (*Theory of value)

They represent the quantitative relation of production goods in a unit of product.

J.A. Schumpeter

PRODUCTION COST (*Theory of value)

All expenses which must be met in order to provide the commodity or service, transport it to the buyer and put it into the hands ready to satisfy his wants.

Edward Chamberlin

PRODUCTION DEBT (*Monetary theory)

Productive debt. Debt created in the acquisition of money, goods and services to aid in the process of productions to meet payrolls, to purchase inventory, to cover costs of storage and transportation or to purchase land, buildings and equipment used in production.

L.V. Chandler

PRODUCTION FUNCTION (*Theory of value)

The technical relationship telling the amount of output capable of being produced by each and every set of specified inputs (or factors of production). It is defined for a given state of technical knowledge.

P.A. Samuelson

The relationship between the rates of input or productive services and the rate of output of product.

G.J. Stigler

PRODUCTION NEED (*Economics of planning)

Needs of production. The amounts of labour-power, and material means of production, i.e. raw material, auxiliary material, equipment machinery, buildings etc.

Bettelheim

PRODUCTIVE CONSUMPTION (*Theory of value)

The use of wealth in the production of further wealth.

Alfred Marshall

PRODUCTIVE IRRIGATION WORK (*Agricultural economics)

A project which is expected to yield a net revenue sufficient to cover the interest on the capital invested, within a few years.

Das and Chatterji

PRODUCTIVE LABOURER (*Theory of value)

Productive labourers are all those whose labours satisfy wants—all those who bring about satisfactions or utilities.

F.W. Taussig

Those activities that lead to the physical 'creation' of material goods constitute productive labour.

Adam Smith and *Karl Marx*

PRODUCTIVE UNIT (*Theory of value)

Any individual or group (business or governmental) which combines factors of production for the purpose of creating or adding to economic value.

Sam Rosen

PRODUCTIVITY (*Theory of value)

What the factors of production produce.

A.W. Stonier and D.C. Hague

The ratio between output and input in an enterprise, an industry or an economy as a whole.

International Labour Organisation

PROFIT (*Theory of value)

Entrepreneurial income.

W.J. Fellner

Excess of receipts over costs.

Frederic Benham

The net income accruing to the owner of a business after all costs are accounted for.

A.L. Meyers

Income from real capital.

J.L. Hanson

A variable or residual reward, remaining after contractual costs of all kinds have been made.

D.H. Robertson

The difference between the cost of production of the current output and its actual sale-proceeds (so that the profits are not part of the community's income thus defined).

J.M. Keynes

PROFIT ECONOMY (*Economics of development)

Capitalism.

Dudley Dillard

PROFIT INFLATION (*Monetary economics)

It is a special term coined by Keynes in his *Treatise on Money* to describe the condition when prices increase more than business costs or prices fall less than costs.

Dudley Dillard

PROFIT ON PRODUCTION (*Theory of value)

It corresponds to the gap between the cost price of products and their selling price, when the latter is fixed at the money equivalent of their value.

Bettelheim

PROFIT ON REALIZATION (*Theory of value)

It consists of the greater or less receipts obtained through the fixing of the price above or below the value.

Bettelheim

PROFIT RATE (*Theory of value)

This term is proposed by R.G. Hawtrey for true profits. He describes profit rate as being the ratio of labour saved per annum by the capital actually in use to labour expended on first cost, corrected for price changes.

Gottfried Von Haberler

PROFIT SYSTEM (*Economics of development)

Capitalism.

A.P. Lerner

PROFITEERS (*Industrial economics)

A limited number of business entrepreneurs in whose hand the increase in aggregate national income is concentrated.

Dudley Dillard

PROGNOSIS (*Economic research)

The third and final phase of research. It means production of future developments.

R. Ferber and P.J. Verdoorn

PROGRAMME (*Economics of planning)

Subordinate plan.

Bettelheim

PROGRESSIVE TAXATION (*Public finance)

Tax which takes a larger proportion from those who are better off.

Frederic Benham

It implies that the rate of taxation should increase with increases in income i.e. the higher the income the higher should be the ratio of tax.

Andley and Sundharam

PROLETARIAT (*Marxian economics)

A term used by Karl Marx to denote wage-earners.

Compiler

By proletariat is meant the class of modern wage-labourers who, having no means of production of their own, are reduced to selling their labour power in order to live.

Frederick Engels

PROMISSORY NOTE (*Monetary economics)

An unconditional promise to pay a certain sum of money to the order of a certain individual at a certain time.

W.W. Haines

An unconditional statement in writing made by one person to another signed by the maker, promising to pay on demand, or at a fixed or determinate time in the future, a stated sum of money to order or to bearer.

L.V. Chandler

PROMOTERS (*Industrial economics)

A special class of entrepreneurs who make it their business to look for business opportunities, start a business organisation, and when it becomes a going concern, sell out their interest to another enterpriser or group who will carry it on from there.

Raymond Bye

PROPENSITY TO ABSORB (*Theory of value)

The increase in total willing absorption of output which results from a unit increase in output. It is the sum of two similar quantities—the propensity to consume and the propensity to invest.

K.E. Boulding

PROPENSITY TO CONSUME (*Keynesian economics)

The concept is a formal mathematical relationship between amounts of consumption corresponding to amounts of income for the community as a whole. It is Keynes's term.

Dudley Dillard

The relationship between any individual's income and his consumption.

A.P. Lerner

The keenness or otherwise of people to buy consumers' goods.

J.L. Hanson

A schedule of the amounts that are spent for consumption at different levels of income.

Raymond Bye

The functional relationship between a given level of income and the expenditure on consumption out of that level of income.

J.M. Keynes

PROPENSITY TO HOARD (*Keynesian economics)

Liquidity preference.

Dudley Dillard

PROPENSITY TO SAVE (Keynesian economics)

Saving schedule. It relates saving to income.

P.A. Samuelson

Keenness or otherwise of people to refrain from the purchase of consumers' goods. It is a Keynes's concept.

J.L. Hanson

A schedule of the amounts that are saved at different levels of income.

Raymond Bye

PROPERTY (*Economics of development)

The legal right to exclude other people from using a particular resource.

Arthur Lewis

PROPORTIONAL RESERVE SYSTEM OF NOTE-ISSUE (*Monetary economics)

Under this system, the Central Bank is to maintain a certain percentage, generally varying from 25 per cent to 40 per cent of gold reserve. This system was adopted in France after 1928 and was recommended for adoption in India by the Hilton Young Commission.

A.K. Basu

PROPORTIONAL TAXATION (*Public finance)

It implies that the rate of taxation should be the same throughout regardless of the size of income.

Andley and Sundharam

PROSPECTIVE YIELD (*Keynesian economics)

It is what a business firm expects to obtain from selling the output of its capital assets.

Dudley Dillard

Anticipated and not realized yields.

A.W. Stonier and D.C. Hague

When a man buys an investment or capital asset, he purchases the right to the series of prospective returns, which he expects to obtain from selling its output, after deducting the running expenses of obtaining that output, during the life of the asset. This series of annuities Q_1, Q_2......Q_n it is convenient to call the prospective yield of the investment.

J.M. Keynes

PROSPERITY (*Business cycles)

A state of affairs, in which the real income consumed, real income produced and the level of employment are high or rising and there are no idle resources or unemployed workers or very few either.

Gottfried Von Haberler

Prosperity is one of the four major phases of trade cycle, the other three being depression, recovery and recession.

Compiler

PROTECTION (*International economics)

Encouragement given to a home industry by means of a tariff.

Fairchild

A policy of encouraging the home industries by the use of bounties or by the imposition of high customs duties on foreign products.

K.K. Dewett

Protection is the opposite of free trade.

Compiler

PROTECTIVE TARIFF (*International economics)

A tax collected by the government on all importations of the commodity in question.

Raymond Bye

PROVIDENT FUND (*Economics of labour)

The underlying principle of the scheme is that an employee pays regularly a specified amount usually prescribed as a percentage of his salary to a fund maintained for the common benefit of all employees in the same service. In many cases, the employer also contributes to the fund, such contribution being generally equal to that of the employee. The contributions are made till the employee ceases to remain in service of the employer either through regular retirement or voluntary resignation or any other contingency. On such termination of the service, the employee is entitled to the full amount contributed by him and his employer to the fund during the period of his service together with such interest as might accrue on the amounts paid, although in some cases, the employer's contribution and the interest thereon can be claimed only if the employee had put in a specified period of service.

NCAER

PROUDHON, PIERRE JOSEPH (1809-65) (*History of economic thought)

A well known and controversial French socialist and the exponent of

syndicalist and anarchist doctrine. His whole argument was: "property was theft."

Proudhon was born of a brewer at Besancon. Though he did not have higher education, in 1940 he wrote his first and famous book *What Is Property*. In 1846, he brought out *Philosophy of Misery*.

Compiler

PRUDENTIAL RESTRAINT (*Demography)

A population check suggested by T.R. Malthus. It implies not birth control, but postponement of marriage and abstinence after marriage.

Frederic Benham

PSYCHIC INCOME (*Theory of value)

Total utility.

F.W. Taussig

PSYCHOLOGICAL THEORY OF TRADE CYCLE (*Business cycles)

It is put forward by A.C. Pigou.

People respond to wars, inventions, changes in demand and so on, either optimistically or pessimistically. It is this response, rather than the events themselves that set off cycles. According to Pigou, "optimistic error and pessimistic error......give birth to one another in an endless chain."

Anatol Murad

PSYCHOLOGICAL UTILITY (*Theory of value)

Total utility.

P.A. Samuelson

PUBLIC AUTHORITIES (*Public finance)

The term includes all sorts of territorial governments, from parish councils up to national, federal, and even international governments.

Hugh Dalton

PUBLIC COMPANY (*Industrial economics)

A company which is not a private company.

The Indian Companies Act

[See "Private company"—Compiler].

PUBLIC DEBT (*Public finance)

The loans contracted by the government of a country from its public or outside.

Das and Chatterji

PUBLIC ECONOMICS (*Public finance)

A comprehensive study of government in all its economic aspects. It studies the nature and complexities of economic life and the necessity to control it; the factors which are responsible for the extension of governmental economic activity, the sources of government finance, allocation of government finance among different uses, the need for economic planning and so on. In short it is a branch of applied economics which deals with all the economic activities of the state.

Andley and Sundharam

PUBLIC EXPENDITURE (*Public finance)

It refers to the expenses of the public authorities—central, state, and local governments—either in protecting the citizens or in promoting their economic and social welfare.

Andley and Sundharam

PUBLIC FINANCE (*Public economics)

"The investigation into the nature and principles of state expenditure and state revenue."

Quoted

It deals with expenditure and income of public authorities of the state, and their mutual relation as also with the financial administration and control.

Bastable

A field of inquiry that treats of the income and outgo of governments (federal, state and local). In modern times, this includes four major divisions: Public revenue, public expenditure, public debt and certain problems of the fiscal system as a whole such as fiscal administration and fiscal policy.

Harold Groves

It is concerned with the income and expenditure of public authorities and with adjustment of the one to another; adjustment not necessarily to equality but to whatever arithmetical relationship, in given conditions is best.

Hugh Dalton

The complex of problems that centre around the revenue-expenditure process is referred to traditionally as public finance.

Richard Musgrave

A study that deals with the finances of the public as an organised group under the institution of government. It deals only with the finances

of the government. The finances of the government include the raising and disbursement of government funds. Public finance is concerned with the operation of the fisc i.e. public treasury.

Philip E. Taylor

PUBLIC GOODS (*Economics of development)

Goods belonging to the society as a whole, such as roads, railways canals etc.

Compiler

Economic goods supplied gratuitously to individuals yet involving effort and consequent expense to some one.

F.W. Taussig

PUBLIC INVESTMENT (*Economics of development)

Any autonomous increase in net government outlays.

Dudley Dillard

PUBLIC LAW 480 (P.L. 480) (*International economics)

The Agricultural Trade Development and Assistance Act of 1954 was the 480th public law enacted by the 83rd Congress of the United States of America. Popularly termed as P.L. 480, the programme began in 1954.

Under Public Law 480 (Food for Peace) programme, the U.S.A. supplied to India agricultural commodities such as wheat, sorghum, maize, rice, cotton, vegetable oil, tallow, tobacco, non-fat dry milk, evaporated milk, whole milk powder, tinned fruit and cheese. India paid for P.L. 480 supplies in rupees. Of all the countries India has been the largest recipient of agricultural commodities under Title I of P.L. 480 which was signed on August, 29, 1956.

Compiler

PUBLIC SECTOR (*Economics of development)

The economic sector in which the entire system of production and distribution are managed, owned, controlled and financed by the state and the individuals are not allowed to have any foot in this sphere. Mostly, defence, key and heavy industries fall in this group.

A.B. Bhattacharya

PUBLIC-CUM-PRIVATE SECTOR (*Economics of development)

The sector which is under the control and management of a joint authority consisting of the state and private enterprises.

A.B. Bhattacharya

PUBLIC UTILITIES (*Economics of development)

The undertakings providing water, electricity, gas, telephone and telegraphic service and rail transport. They are called public utilities not because they provide for essential needs but because they tend to be local monopolies.

Frederic Benham

PUBLIC WORKS (*Economics of development)

Durable goods, primarily fixed structures, produced by the government.

J.M. Clark

PUMP PRIMING (*Public finance)

It implies that the economic system has been in unstable equilibrium before the injection of new spending pushes it back on the track from which it has been derailed by some fortuitons event. (Keynes's theory is really a repudiation of pump-priming thesis).

Dudley Dillard

Compensatory spending by the government may be undertaken on a larger scale with the hope of (a) checking the decline in demand, production and employment and (b) to provide an initial impetus to the forces of business recovery which may be taken up by the private sector. Compensatory spending of this variety is known as pump priming.

Andley and Sundharam

A special case of compensation (compulsory spending) involving "one-shot" injection of government expenditure into the income stream, in the hope that this will so strengthen private demand so as to restore and maintain full employment.

P.E. Taylor

A concept of public expenditures. It signifies that a certain volume of public spending will serve to start up the economic machine, which thereafter will reach satisfactory levels of output on its own power.

J.A. Estey

PURCHASING POWER OF MONEY (*Monetary economics)

The power of money to buy the goods and services on the purchase of which for purposes of consumption, a given community of individuals expend their money income.

J.M. Keynes

The term "the general purchasing power of money" is usually and reasonably taken to mean the power which money has of purchasing commodities in a country (or other place) in those proportions in which they are in fact consumed there.

Alfred Marshall

An average of consumers' goods prices. It is the price level par excellence.

Value of money in terms of goods.

J.M. Keynes

PURCHASING POWER PARITY THEORY OF RATE OF EXCHANGE

Compiler

(*International economics)

It says that the exchange rate between two countries should be in the same ratio as the price levels of those countries.

W.W. Haines

For brevity it is known as P.P.P.T. It was evolved by Prof. Gustav Cassel of Sweden. Briefly it states that where the exchange rate between two countries is free to move without limit, it tends to approximate to the point where each currency will buy as many goods in the other country's market as in its own home market. The rate of exchange so fixed is known as purchasing power parity.

Norman Crump

It says that the rates of foreign exchange between two currencies move in the same way as the ratio of an Inter-nation Index expressed in the prices of one country to the same Index expressed in the prices of the other country.

J.M. Keynes

The rate of exchange between two currencies must stand essentially on the question of the internal purchasing power of these currencies.

Gustav Cassel

The value of the unit of one currency in terms of another currency is determined, in the long run, by the relative values of the two currencies as indicated by their relative purchasing power over goods and services. In other words the rate of exchange tends to rest at this point which expresses equality between the respective purchasing powers of the two currencies. This point is called the p.p.p.

S.E. Thomas

The theory states that under inconvertible paper standard the external value of a currency is determined by its internal value.

Compiler

The theory is generally associated with the name of Prof. Gustav Cassel, but the gist of the theory was put forward a century earlier during the controversies over the Bullion Report of 1810.

A.K. Cairncross

PURE DUOPOLY (*Theory of value)

A situation in which there are only two sellers each selling a product identical with that of his competitor (no product differentiation) and with no agreement either tacit or expressed, between the two sellers as to price or amount of output.

A.L. Meyers

PURE COMPETITION (*Theory of value)

Highest competition.

W. Fellner

A type of market where demand for the product of the individual firm is infinitely elastic, so that the firm could sell all it wished at the existing marketing price. It is characterised by three pre-requisites—large number of buyers and sellers (or firms in the industry), homogeneous or identical product and free entry (in the sense that anyone who wishes to enter the industry must be allowed to do so).

A.W. Stonier and D.C. Hague

PURE ECONOMICS (*Economics)

Theoretical economics. It is light giving. It is chiefly concerned with the study of general principles. It deals with the study-formulation and enunciation of the general principles that govern human behaviour in its economic aspects.

Vaish and Sundharam

There are three phases of economics. Pure economics, economic ethics and applied economics. Pure economics tells us *what is* in the world of economic affairs; economic ethics tells us *what ought to be*; and applied economics tells us *how* to get it.

Raymond Bye

Dr. Alfred Marshall bifurcated economics into pure and applied economics.

Compiler

PURE GOLD STANDARD (*Monetary economics)

The situation in which a nation itself holds no gold but relies solely on its holdings of claims against foreign money to redeem its currency for international purposes.

L.V.Chandler

PURE MONOPOLY (*Theory of value)

This occurs when a producer is so powerful that he is always able to take the whole of all consumer's incomes whatever the level of his output. It is also called perfect monopoly.

A.W. Stonier and D.C. Hague

A state where the bulk of the supply of a commodity and its substitutes is under the control of one firm.

Briggs and Jordan

One seller of a product without close substitutes.

G.L. Bach

A market situation in which a single firm sells a product for which there is no close competitor or rival and for which there is no good substitute. In short, a single firm in a monopoly situation has the market for its product all to itself.

P.W. Bell and M.P. Todaro

PURE MONOPSONY (*Theory of value)

The market situation where there is only one buyer.

Raymond Bye

PURE PROFITS (*Theory of value)

The differences between gross profits and the sum of implicit interest and rent on enterprisers' capital and implicit wages of management.

Raymond Bye

Net income in excess of opportunity costs as well as of out of pocket costs.

A.L. Meyers

PURE RATE OF INTEREST (*Theory of value)

Riskless rate of interest. The rate of interest on gilt-edged bonds.

A.W. Stonier and D.C. Hague

What is paid for a loan apart from any considerations other than the difference in time between the date of borrowing and the date of repayment.

Abba P. Lerner

PURE SCIENCE (*General economics)

It confines itself to accurate description of phenomena; it explains what is and how it works and what are its effects, but it does not concern itself with what ought to be, nor tell us whether the effects are good or bad.

R.T. Bye

A science that is concerned with the collection and analysis of data and the formulation of laws and the principles, without concern at least too much, with the mundane application of the results.

C.W. Forster and M.C. Leager

PURELY MONETARY THEORY OF TRADE CYCLE (*Business cycles)

The theory is expounded by R.G. Hawtrey. According to him trade cycle is "Purely a monetary phenomenon". According to his theory, changes in the supply of money are the sole and sufficient cause of changes in business activity, of alternating phases of prosperity and depression.

Compiler

QUALITATIVE CONTROL OF CREDIT (*Monetary economics)

Selective control of bank credit. These controls are concerned with the kind of loans and investments made by the banks—whether for short or long terms, whether to finance the purchase the industrial equipments or consumer durables (household appliances, automobiles), whether of conservative or of speculative nature and the like.

Raymond Bye

QUANTITATIVE CONTROL OF CREDIT (*Monetary economics)

These controls are concerned with the total volume of bank credit.

Raymond Bye

QUANTITATIVE ECONOMICS (*Economics)

That branch of economics which concerns itself with the collection and analysis of statistical information.

Compiler

QUANTITY OF MONEY (*Monetary economics)

The amount of funds in the form of coins, paper currency and bank deposits outstanding in the hands of the public.

Dudley Dillard

The total amount of money in existence.

Compiler

Amount of money in circulation.

F.A. Von Hayek

QUANTITY THEORY OF MONEY (*Monetary economics)

The strictest version of the theory states that the value of money varies inversely and the general price level directly, in proportion to changes in the money supply.

Frederic Benham

It states that the value of money, other things being the same, varies inversely as its quantity; every increase of quantity lowers the value and every diminution raising it in a ratio exactly equivalent.

J.S. Mill

It may be stated thus: the level of prices varies directly with the quantity of money in circulation, provided the velocity of circulation of that money and the volume of trade which it is obliged to perform are not changed.

Irving Fisher

As first formulated by Locke at the end of the 17th century, the theory stated simply that average prices are always in proportion to the quantity of money, the quantity of money being understood to include the "quickness of its circulation".

Mark Blaug

It states that the level of prices tends to vary with the quantity of money in circulation.

Joan Robinson

Of all the theories purporting to explain the determination of the value of money at any one time and the variations of this value over periods of time, the so-called quantity theory in its various forms is the oldest and has been the most influential. Crude statements of it are found at least as far back as Roman writings. It became somewhat better developed during the price revolution of the sixteenth century; and by the end of the eighteenth century it had received clear formulations notably from Jean Bodin, Richard Cantillon and David Hume that resemble closely those of modern quantity theorists. As the quantity theory developed it assumed two general forms, though both lead to the same conclusions. The first is usually referred to as "the transaction approach" and the second is called "the cash balance approach."

L.V. Chandler

QUASI-MONEY (*Monetary economics)

Near money.

F.S. Brooman

QUASI RENT (*Theory of value)

The concept introduced by Alfred Marshall, signifies surplus from machines.

W.J. Fellner

The earnings of assets like machinery and plant and equipments.

Frederic Benham

Earnings from machines and other appliances made by man.

A.W. Stonier and D.C. Hague

The earnings of fixed capital.

D.H. Robertson

Payment to a factor in temporarily fixed supply.

P.W. Bell and M.P. Todaro

The term was introduced by prof. Alfred Marshall to differentiate between the earnings of land and the earnings of man-made capital goods.

Compiler

QUESNAY, FRANCOIS (1694-1774) (*History of economic thought)

Chief representative of physiocracy and the creator of the famous *Tableau Economique*.

Born in Mere (France), Quesnay was by profession a doctor. He became court physician to Madame de Pompadour (1749), the King's mistress and the King Louis XV (1755). At the age of 64, Quesnay burgeoned as an economist by publishing *Tableau Economique* (Table of Economics). The Tableau which elder Mirabeau regarded as an invention as important as that of printing involves a concept similar to that now known as the national income. In it economic life is rendered as a series of quantitative flows between the different sectors of the economy. The *Tableau* which seeks to make political economy an exact science, is a precursor to W. Leontieff's Nobel prize winning input-output table. Quesnay regarded agriculture alone as productive and, advocated single direct tax on the *produit net* and enunciated iron law of wages.

Many historians of economic thought consider Quesnay as the true founder of political economy.

Compiler

QUESTIONNAIRE (*Statistics)

A list of queries designed to elicit the required information in the from of short answers filled into the blank spaces beside the questions either by the interviewer or by the informant.

G.S. Monga

QUID PRO QUO THEORY OF TAXATION (*Public finance)

Benefit theory of taxation. In short, it states that the state should levy taxes according to the benefits conferred on the tax-payers.

K.K. Dewett

QUOTA (*International economics)

The prescribed amount of money and gold which is deposited by a member country with the International Monetary Fund.

K.K. Dewett

Each member country subscribes in gold and in its own currency, a carefully determined amount which is called its quota.

G.N. Halm

RADCLIFFE COMMITTEE (*Monetary economics)

The Committee on the Working of the Monetary System was appointed by the then Chancellor of Exchequer Mr. Peter Thorneycroft in May, 1957 under the chairmanship of Lord Radcliffe to inquire into the working of the monetary and credit system of England and make recommendations. The Committee which reported in July 1959, concluded that monetary system should accord priority to controlling the liquidity of the monetary system and not the quantity of money in the system. It observed, "We are driven to the conclusion that the more conventional instruments (e.g. Bank rate) have failed to keep the system in smooth balance."

Professors A.K. Cairncross and R.S. Sayers were, among others, the members of the Committee.

Compiler

RAJ, K.N. (*History of economic thought)

A distinguished contemporary Indian economist. He was the president of the Indian Economic Association (in 1972) and Vice-Chancellor of Delhi University. Dr. Raj of Delhi University has made significant contributions to economic theory and practice through many of his writings such as *Indian Economic Growth : Performance and Prospects* (1965), *Employment Aspects of Planning in Under-developed Countries* (1956). Along with Amartya Kumar Sen, he advanced a model of economic growth the main conclusion of which is that there is a choice between constant consumption or its constant rate of growth. In 1956 while writing in the context of India's second Five-Year Plan, Dr. K.N. Raj recommended optimum technique with regard to small scale industries. He has been arguing for import substitution and self-reliance.

The Government of India appointed on Frebruary 24, 1972 the Committee on Taxation of Agricultural Wealth and Income under the chairmanship of Dr. Raj to find out ways and means of mobilising tax resources from the agricultural sector. In his report released on November 1, 1972, Dr. Raj suggested the introduction of a novel progressive tax viz., Agricultural Holdings Tax (AHT) in place of the existing land revenue which is the tax on net rateable value of an agricultural land holding or simply a tax on net farm business income. The AHT which Professor M.L. Dantwala, praised as "valiant effort", is leviable on operational holding—owned land minus land leased out plus land leased in. Dr. Raj also recommended the partial integration of taxation of agricultural and non-agricultural income.

At present Dr. Raj is the Director of Centre for Development Studies at Trivandrum.

Compiler

RANADE, MAHADEV GOVIND (1842-1901) (*History of economic thought)

A great Indian nationalist economist, economic relativist, the first proponent of economic planning, father of Indian economics and institutionalist.

Born at Nasik on January 18, 1842, Ranade took his M.A. from Bombay University in 1864 and the same year he was appointed a lecturer in economics in that university. Later he qualified for the degree of law and became a judge in the state of Kolhapur in 1867, Presidency Magistrate in Bombay in 1881, Law Member of the Bombay Legislative Council in 1885 and the Judge of the Bombay High Court in 1893. Justice Ranade started the *Quarterly Journal* in 1878 and the Deccan Education Society in 1884.

Ranade, the author of the famous book *Essays on Indian Political Economy* (1898) was influenced by the thinking of the American, German and French economists and socialists. He held that hypothetical classical economics as developed in England was inapplicable to the Indian conditions. He argued that inductive or historical method was realistic by saying that in the "dynamical study of the progress of wealth, the value of deductive method is nill." Ranade suggested that economic theory and practice should go together and that theory should revolve round body politic and not indivdual. He criticised *laissez faire* and free trade and advocated industrialisation and protection. He gave wide currency to the concepts of welfare state and the organic unity of the state. He wanted the eradication of abject poverty and unemployment in India.

Compiler

RANDOM COMPONENT (*Econometrics)

In the broad sense, a variable which can assume more values than one, and where it is not certain before hand which of these values will be assumed in certain circumstances—for instance at a certain moment of time.

Jan Tinbergen

RANDOM MOVEMENTS (*Business cycles)

Lesser economic fluctuations caused by sporadic occurrences as strikes or the vicissitudes of the weather.

Raymond Bye

RANDOM SAMPLE (*Statistics)

The words "random sample" are a convenient abbreviation of the longer but more accurate phrase "a sample chosen in a random way". A

sample is chosen in a random way when every possible sample as an equal chance of being picked.

B.C. Brookes and W.F.L. Dick

RANGE (*Statistics)

The difference between the extreme values of the variable.

B.C. Brookes and W.F.L. Dick

RAO, VIJAYENDRA KASTURI RANGA VARADARAJ (B. 1908)
(*History of economic thought)

One of India's foremost economists.

Born of father K. Kasturi Rangachar and mother Bharathi on July 8, 1908 at Kancheepuram (Tamil Nadu), V.K.R.V. Rao passed his B.A. (Hons.) and M.A. —both in first class—from the University of Bombay. He also passed B.A.(Hons) in first class from Cambridge University. "Taxation of Income in India" written at the age of 23 years under the guidance of the late Prof. C.N. Vakil, was his M.A. thesis. Rao, a student of the late Mrs. Joan Robinson and the product of Wilson College, Bombay, Gonville and Caius College, Cambridge, was awarded Ph.D. degree by Cambridge University.

Dr. V.K.R.V. Rao possesses enviable career. Starting as a lecturer in Economics in Wilson College in 1929, he has served as Special Professor of History and Political Economy, Karnataka College, Dharwar, 1934-35; Senior Lecturer in Economics, Andhra University, 1936-37; Principal and Professor of Economics, L.D. Arts College, Ahmedabad, 1937-42; University Professor of Economics, Delhi University, 1942-61; Director of Statistics, Food Department, 1944-45; Planning Adviser, Food Department, 1945-46; Food and Economic Adviser, Washington, 1946-47; Founder-Director of Delhi School of Economics, 1948-57; Vice-Chancellor, Delhi University, 1957-60; Founder-Director, Institute of Economic Growth, Delhi, 1960-63; Member Planning Commission, 1963-66; Union Minister for Transport and Shipping, 1967-69; Union Minister for Education and Youth Service, 1969-71 and Founder-Director (now Chairman), Institute for Social and Economic Change, Bangalore since 1972.

Dr. Rao has won numerous academic awards, viz., Cabdon club medal in Political Economy, Lord Minto scholarship, Dakshina fellowship, Sir Mangaldas Nathubhai Travelling Fellowship, Carton studentship in Social Sciences (Great Britain), Sir Thomas Gresham Research studentship, Cambridge; Dadabhoy Naoroji Memorial prize, Adam Smith prize in Political Economy, Cambridge, Dyson Memorial lecture, Australia, Gandhi lecture, Oxford etc.

Dr. V.K.R.V. Rao an intellectual colossus is the recipient of Hon. D. Litt. degree of Delhi, Indore, Jabalpur, Andhra and Nagpur universities and Hon. D.C.L. of Oxford University. He was Honorary Professor of Economics at Osmania and Andhra Universities, Honorary Fellow at

Gonville and Caius College, and Professor Emeritus in Social Sciences Delhi University. In 1984 he was made the National Professor—a very prestigious honour.

Dr. Rao who was awarded the country's second highest award of Padma Vibhushan in 1974 has the historic record of having built three leading research institutes—two at Delhi in 1948 and 1960 and one in Bangalore in 1972.

Dr. Rao, a versatile genius has been *inter alia* corresponding member, Institute de science Economique, Paris; Correspondent, Royal Economic Society, London; Honorary Member, Japanese Economic Research Institute, Tokyo; Member, International Statistical Institute, Amsterdam; President Indian Economic Association, (1949), Indian Commerce Association, Indian Labour Economic Association, Indian Agricultural Economic Association, and Indian Educational Association; Member, Consultative Committee of Economists; Chairman of the U.N. Sub-Commission, Economic Development; Member, National Income Committee; Member, Planning Advisory Board; Chairman, U.N. Sub Committee of Experts on Levels of Living; Member, Taxation Enquiry Commission; Member, Penal of Economists, Planning Commission; Chairman, Demographic Research Advisory Committee; Chairman, Committee on Distribution of Income; Chairman, Committee on Distribution of incnme; Chairman, Research Programmes Committee of Planning Commission; Chairman Tariff Commission Review Committee; Chairman, Steering Committee for UNESCO Research Centre on Social and Economic Development; Vice-President, Institute of Applied Manpower Research; Chairman, Institute of Foreign Trade; Chairman, Central Advisory Board of Education; Vice-President, Council of Scientific and Industrial Research etc.

Dr. Rao has extensively written on economics. His major publications are:

(1) *Taxation of Income in India* (1931),
(2) *An Essay on India's National Income* (1936),
(3) *The National Income of British India* (1940),
(4) *War and the Indian Economy* (1943),
(5) *India and the International Currency Plans* (1945),
(6) *Post-War Rupee* (1948),
(7) *Foreign Aid and India's Economic Development* (1962),
(8) *Essays in Economic Development* (1963),
(9) *Greater Delhi—A Study in Urbanisation* (1965),
(10) *Education and Human Resources Development* (1966),
(11) *The Gandhian Alternative to Western Socialism* (1970),
(12) *Values and Economic Development—The Indian Challenge* (1971),

(13) *Inflation and India's Economic Crisis* (Jointly), (1973),
(14) *Agricultural Labour in India* (edited) (1961),
(15) *Employment and Unemployment* (edited) (1965),
(16) *Bangladesh Economy—Problems and Prospects* (1972).

Dr. Rao proposed the creation of the Special United Nations Fund for Economic Development (SUNFED). He was the first in the country to scientifically compute national and per capita income. In calculating national income, he used both the inventory and income methods. To reform the income tax system he suggested that gross and net incomes should be clearly differentiated; the rate of tax should be properly graduated; agricultural incomes should be brought under the ambit of of tax net; and H.U.F. should be statutorily recognized. He suggested that the IMF should countries and and not just be an exchange stabilization machinery. He found Keynesian treatment of full employment unsatisfactory and pointed out that disguised unemployment and not 'Keynesian' unemployment prevailed in the expanding economies. He argued that deficit financing could be employed for economic development. To him foreign aid must be without political strings. He endorsed the second devaluation of the Indian rupee (1967). Dr. Rao, a socialist economist, is of the opinion that the Government must enter distributive system. His anti-inflationary measures include: a surcharge on traders, turnover and land revenue adjusted by the size of holdings and natural crops grown and sumptury taxation on goods consumed by the rich.

Rao holds that Keynesian economics is inapplicable to underdeveloped countries.

Compiler

RATE OF DISCOUNT (*Monetary economics)

The rate, a central bank charges its members for discounting approved commercial paper or making advances on appropriate security.

J.A. Estey

It is also called bank rate. It represents the rate of interest at which the central bank is prepared to lend money against bills of a standard type.

Gottfried Von Haberler

RATE OF EXCHANGE (*International economics)

The exchange ratio between the currencies of different countries.

Gottfried Von Haberler

The price of the money of one country expressed in the money of the other.

Eschar

The amount that will be paid in the money of the home country for one unit of the money of the foreign country payable in that country.

Fairchild, Buck and Slesinger

RATE OF EXPLOITATION (*Marxian economics)

Profit per man.

Joan Robinson

RATE OF GROWTH (*Economics of development)

The percentage increase in the national income per annum.

Compiler

RATE OF GROWTH OF POPULATION (*Demography)

It is either the absolute number of persons, or the percentage, by which a population is increasing or decreasing each year.

Editors: H.F. Williamson and J.A. Buttrick

RATE OF INTEREST (*Theory of value/Monetary economics)

According to the "Pure theory of interest", which explains in non-monetary terms, the rate of interest is the price of capital determined by the marginal productivity of capital in a technological sense and by certain psychological factors (time-preference) influencing the relative urgency of present and future needs.

Gottfried Von Haberler

The price at which loans of money are made. To put it in another way, it is the price of money in terms of bonds.

A.W. Stonier and D.C. Hague

The payment made for the privilege of borrowing money.

A.P. Lerner

The reward for parting with liquidity for a specified period.

OR

Inverse proportion between a sum of money and what can be obtained for parting with control over the money in exchange for a debt for a stated period of time.

OR

The price which equilibriates the desire to hold wealth in the form of cash with the available quantity of cash.

J.M. Keynes

The rate of interest is the amount of money charged on loans or received on deposits, per one hundred rupees per annum.

Compiler

RATE OF INVESTMENT (*Economics of development)

The net increment during a period of time of the capital of the community.

J.M. Keynes

RATE OF RETURN OVER COST (*Theory of value)

That rate which, employed in computing the present worth of all the costs and the present worth of all the returns will make these two equal.

Irving Fisher

The phrase was introduced by Professor Irving Fisher.

Compiler

RATED CAPACITY (*Industrial economics)

A complex technical concept which should take into account the design of the plant, the number of shifts per day in the case of plants adopting batch or continuous processes and the number of working days per annum. Rated capacity has also to take into account the balance between the different sections in a given unit, age of the plant and its condition.

The First Five-Year Plan of India

RATIONAL (*Theory of value)

It must not be interpreted in a value sense as being 'sensible'. All that the economist mean by 'rational' is that the individual is consistent in his behaviour in the sense that he tries to get the most out of his limited resources.

J. Harvey

RATIONAL BEHAVIOUR (*Theory of value)

Acting in such a way that greatest possible satisfaction is derived from the available money resources. It implies deliberate planning in order to obtain maximum satisfaction with limited resources.

A.W. Stonier and D.C. Hague

RATIONAL CONSUMER (*Theory of value)

Sensible buyer who balances marginal cost against marginal gain.

Compiler

RATIONALISATION (*Industrial economics)

The method of technique and organisation designed to secure the minimum waste in effort and material, added to that, the scientific organisation of labour, the statdardisation of materials and products and products and the simplification of processes and physical improvements in the system of transport and marketing.

Balfour

The process of increasing the efficiency of industry and of reducing the cost of production. It is a huge process and covers various aspects such as renovation and modernisation of machinery and technical equipment in factories, replacement of labour, labour-saving devices, increase in the tempo of work by scientific management and improvement in the organisation of industry to eliminate wasteful competition.

P.C. Jain

Rationalisation is the employment of all means of technique and ordered plans which serve to elevate the whole industry and to increase production, lower its costs and improve its quality.

National Board for Economy and Efficiency

Rationalisation includes the scientific organisation of labour, standardisation of both material and products, simplification of processes and improvement in the system of transport and marketing.

The World Economic Conference 1927(Geneva)

(a) Rationalisation *in general* is any reform tending to replace habitual antiquated practices by means and methods based on systematic reasoning.

(b) Rationalisation *in the narrowest sense* is any resorm of an undertaking administration or other service—public or private tending to replace habitual, antiquated practice by means or methods based on systematic reasoning.

(c) Rationalisation *in the wider sense* is a reform which takes group of business undertakings as a unit and tends to reduce waste and loss due to unbridled competition by concerted action based on systematic reasoning.

(d) Rationalisation *in the widest sense* is a reform tending to use means and methods based on systematic reasoning to the collective activities of the large economic and social groups.

The International Labour Organisation

RATIONING (*Theory of value)

A fair way of sharing out limited supplies of essential commodities in which each gets the same amount at a fixed price.

Frederic Benham

A condition in which the prices are controlled and the available supply is equitably distributed by government agency.

Andley and Sundharam

"Persuading the consumeres to purchase only what has been produced,"

Quoted

RATIONING OF CREDIT (*Monetary economics)

A method of credit control. Towards the end of the 18th century rationing of credit was found to be employed as an instrument of credit control by the Bank of England which placed a limit upon its discounts for any one house or rejected a proportion of each discount application whenever total demands exceeded the sum which it was prepared to discount on any one day.

M.H. deKock

READY DELIVERY MARKET (*Monetary economics)

In stock exchange a contract for the purchase or sale of securities which is to be performed immediately or within a reasonable time.

A.K. Basu

REAL ANALYSIS (*Economic methodology)

As opposed to monetary analysis, it is the analysis that explains economic activity in terms of decisions about goods and services and relations between them.

Mark Blaug

REAL BILLS DOCTRINE (*Monetary economics)

The belief that loans should be made by a commercial bank only to finance the distribution of goods actually in existence.

W.W. Haines

REAL BURDEN OF A TAX (*Public finance)

It relates to the sacrifice which the imposition of a tax entails on the tax payer.

Hugh Dalton

REAL CAPITAL (*Theory of value)

Physical (productive) assets.

Frederic Benham

The material objects used in production.

D.H. Robertson

REAL COSTS (*Theory of value)

Pain costs.

W.J. Fellner

Pains and sacrifices of labour.

Adam Smith

Real cost of production of a given commodity is the next best alternative sacrificed in order to obtain that commodity.

Austrian School of Economics

It is also called opportunity cost or displacement cost.

Compiler

REAL INCOME (*Theory of value)

What can be bought with money income.

Frederic Benham

The goods and services which a person can buy with his money income.

Colin Clark and Haswel

REAL NATIONAL INCOME (*Economics of development)

Country's total output of final goods and services expressed not in money terms but in real terms.

G.M. Meier and R.E. Baldwin

REAL RATE OF INTEREST (*Monetary theory)

It is the money rate of interest corrected for changes in the value of money in terms of goods and services.

Gottfried Von Haberler

(See 'money rate of interest'—Compiler.)

REAL WAGES (*Economics of labour)

The actual assortment of goods and services that a worker is able to buy.

P.D. Shrimali

The purchasing power of money wages in terms of goods and services consumed by the wage-earners plus any facilities provided by the employer, free of cost.

A.K. Saran and V.B. Singh

REASONED ECONOMICS (*Economics)

Pure economics. The term was used by L. Cossa.

Compiler

RECESSION (*Industrial economics)

The turning point during which the forces that make for contraction finally win out over the forces that make for expansion.

J.A. Estey

RECIPROCITY TREATY (*International economics)

Tariff treaty in which two states grant one another tariff reductions without the intention of allowing other states to share automatically in these reductions.

Gottfried Von Haberler

RECTANGULAR HYPERBOLA (*Statistics)

A curve representing constant total outlay at all prices and where elasticity is unity throughout.

K.K. Dewett

REDEEMABLE DEBT (*Public finance)

It is also known as terminable loan.

Redeemable debts are those which the government promises to pay off in the near future at a specified date.

Andley and Sundharam

REDUNDANT LABOUR (*Economics of development)

The industrial reserve army. It competes with the employed labour force and tends to press wages down to the subsistence level.

G.M. Meier and R.E. Baldwin

REFERENCE IN THE CASE OF NEED (*Monetary economics)

A person whose name has been written on the bill of exchange by the drawer or an endorser and to whom the holder may resort in case of dishonour by non-acceptance or non-payment.

A.K. Basu

REFLATION (*Monetary economics)

Inflation deliberately undertaken to relieve a depression.

G.D.H. Cole

REGIONAL PLANNING (*Economics of planning)

Regional decentralisation in framing, executing and supervising various plans. It is carried out within the framework of national planning.

B.C. Tandon

When I say Regional planning, what I have in mind is, to prepare a consistent plan for a nation sub-divided into regions.

Jan Tinbergen

It refers to central control exercised over the economy of a particular area or region which constitutes a part of a country.

M.L. Seth

REGIONAL RURAL BANKS (RRBs) (*Agricultural economics)

The Government of India appointed on July 1, 1975 a working group under the chairmanship of Mr. M. Narasimhan to "examine in depth the setting up of new rural banks as subsidiaries of public sector banks to cater to the credit needs of the rural people." The group in its report submitted on July 30, 1975 recommended the setting up of state sponsored, regionally based and rural oriented commercial banks called regional rural banks. The "role of the new institution would be to supplement and not supplant the other institutional agencies in the field." Accepting the recommendation of the working group, the Government promulgated the Regional Rural Banks Ordinance on September 26, 1975, which later became RRB Act in 1976. RRBs thus came to form the third component (Co-operative credit societies and commercial banks are the two other agencies) of the multi-agency credit system for agriculture and rural development.

The main objective of the RRB is to provide credit to particularly to small and marginal farmers agricultural labourers, artisans and small entrepreneurs.

Each RRB operates within the local limits; it may also open branches. The RRBs are sponsored by nationalised commercial banks. The authorised capital of each RRB is Rs. One crore and the issued capital Rs. 25 crore and the issued capital Rs. 25 lakhs. Of the issued capital, 50 per cent is subscribed by the Central Government, 15 per cent by the concerned state government and the balance of 35 per cent by the sponsoring bank.

In 1975 five RRBs were opened. The number of RRBs covering 266 districts stood at 150 at the end of June 1983, with 6812 branches. By June 1981 these RRBs advanced the total loan of Rs. 261 crores to small marginal farmers, agricultural labourers, and rural artisans. At the end of June 1983 the deposits of these banks amounted to Rs. 534.86 crores.

The appraise the performance of the RRBs, the RBI appointed in June 1977 a committee under the chairmanship of Professor M.L. Dantwala. The committee in its report submitted in February 1978, found the RRBs "a very useful component in the totality of rural credit structure" and recommended their expansion.

Compiler

REGRESSIVE TAX (*Public finance)

A tax is said to be regressive when its burden falls more heavily on the poor than on the rich.

K.K. Dewett

REICHS BANK (*Monetary economics)

Central Bank of Germany. It was founded in 1875.

Compiler

REIMBURSEMENT CREDIT (*Monetary economics)

A type of acceptance credit.

R.S. Sayers

RELATION (*Theory of value)

Prof. R.F. Harrod's term for the principle of acceleration.

Compiler

RELATIVE CROSS ELASTICITY OF DEMAND (*Theory of value)

The percentage change in the quantity of commodity A demanded which would result from a one per cent change in the price of commodity B, all other factors being held constant.

K.E. Boulding

RELATIVE ELASTICITY (*Theory of value)

Kenneth E. Boulding's term for Marshall's concept of 'elasticity' (of demand or supply).

Compiler

RELATIVE TAXABLE CAPACITY (*Public finance)

It refers to the taxable capacity of one community as compared to that of another.

Hugh Dalton

RELATIVELY ELASTIC DEMAND (*Theory of value)

Greater than one elasticity of demand.

Fairchild, Buck and Slesinger

RELATIVELY ELASTIC DEMAND OR SUPPLY (*Theory of value)

A case in which a given change in price will produce a finite but more than proportionate change in the quantity.

K.E. Boulding

RELATIVELY INELASTIC DEMAND OR SUPPLY (*Theory of value)

A case in which a given change in price produces a less than proportionate change in quantity.

K.E. Boulding

RELIEF EMPLOYMENT (*Economics of labour)

As distinguished from economic or productive employment, it provides employment and income but does not contribute really and independently to the net product produced by the society.

Alak Ghosh

REMOTE GOODS (*Theory of value)

Investment goods.

Raymond Bye

RENT (*Theory of value)

The price we pay for the use of a house,

OR

Ordinarily it is a periodical payment made for the use of a thing.

OR

A surplus which accrues to the better land,

OR

Earnings of more or less specified means of production whose supply cannot be increased or diminished.

Frederic Benham

That portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil.

David Ricardo

In colloquial English, the word rent can refer to any periodic payment made regularly for the hire of a good.

In economic theory, the term 'rent' is only applied to payments made for factors of production which are in imperfectly elastic supply—with land as the main example.

A.W. Stonier and D.C. Hague

Rents are the returns to productive services in excess of what they can return in alternative employments. When these returns accrue to the owners of resources hired or purchased by the firm, they are called rents, but when they accrue to the entrepreneurs, they may be called profits.

G.J. Stigler

A surplus earned by a particular part of a factor of production over and above the minimum earnings necessary to induce it to do its work.

Joan Robinson

The reward paid for the use of services of nature.

David Ricardo

Income derived from the free gift of nature.

Alfred Marshall

RENT OF ABILITY (*Theory of value)

Payment for completely 'specific' ability.

A.W. Stonier and D.C. Hague

RENT THEORY OF PROFITS (*Theory of value)

Expounded by F.A. Walker of America, it states that profit is the reward for differential ability of the entrepreneur over the marginal entrepreneur.

K.K. Dewett

RENTIER CLASS (*Monetary theory)

This includes holders of bonds yielding a fixed income or landlords who have let their land or buildings on long leases as well as all who receive pensions or other annuities and social security payments.

Frederic Benham

REPRESENTATIVE FIRM (*Theory of value)

Concept introduced by Alfred Marshall. It refers to a firm working under average conditions and at average efficiency; a firm that might be used as a standard of reference.

Briggs and Jordan

A firm which has had a fairly long life, and fair success, which is managed with normal ability and which has normal access to economies, external and internal, which belongs to that aggregate volume of production; account being taken of the class of goods produced, the conditions of marketing them and the economic environment generally.

Thus a representative firm is in a sense an average firm.

Alfred Marshall

REPRESENTATIVE MONEY (*Monetary theory)

All kinds of money which are freely redeemable in standard money. (Standard money is that having intrinsic value equal to its face value).

Fairchild, Buck and Slesinger

REPRESENTATIVE PAPER MONEY (*Monetary theory)

It derevies its value not from the paper on which it is printed but from the standard coins for which it can be exchanged. It represents an equal amount of metallic money deposited in the strong-room of a bank or of a National Treasury.

R. Mathur

REPRESSED INFLATION (*Monetary theory)

A situation where excess purchasing power tends to force prices up, but the price rise is prevented by artificial means such as price control.

W.W. Haines

REPRODUCTIVE DEBT (*Public finance)

It refers to that debt which when invested yields an income which will not only meet the yearly interest payments of the debt but also help repay the principal over the long run.

Andley and Sundharam

A loan obtainable by a government to purchase some real assets.

J.L. Hanson

RESERVATION PRICE (*Theory of value)

Also called reserve price, it is the price below which the seller will refuse to sell.

K.K. Dewett

The minimum price below which a storekeeper will not sell.

Fairchild, Buck and Slesinger

The price below which the owner of goods prefers to keep instead of to sell them,

Anatol Murad

The term was originated by Prof. H.J. Davenport.

A.L. Meyers

RESERVE BANK (*Monetary economics)

One of the 12 banks in the U.S.A., which constitute the American Central Bank—the Federal Reserve system.

R.S. Sayers

RESERVE BANK OF AUSTRALIA (*Monetary economics)

The Commonwealth Bank of Australia has been reconstituted as the Reserve Bank of Australia under the Reserve Bank Act, 1959 which came into force on June 1, 1960.

A.K. Basu

RESERVE BANK OF INDIA (*Monetary economics)

It is the apex or Central Bank of India. It was established on April 1, 1935 under the provisions of the Reserve Bank of India Act 1934. Formerly it was the shareholders' bank. It was nationalised on January 1, 1949. The RBI as it is popularly known, functioned as the currency authority of Burma till June 5, 1947. It also offered banking service to Pakistan till June 30, 1948.

The main function of the Bank is, "to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage." The Bank which is headquartered at Bombay and is headed by the Governor, performs developmental functions besides traditional functions of a central bank.

Compiler

RESERVE BANK OF NEW ZEALAND (*Monetary economics)

The Central Bank of New Zealand. It was established in 1934.

Compiler

RESERVE BANK OF SOUTH AFRICA (*Monetary economics)

The Central Bank of South Africa. It came into existence in 1920.

Compiler

RESERVE BANKS (*Monetary economics)

Several Central banks have been named reserve banks. This fact appears to show that in the opinion of some authorities, the custody of bank reserves is the characteristic function of a central bank.

M.H. deKock

RESERVE FUND (*Monetary economics)

The accumulation of the undistributed profits of the bank, which are kept earmarked for meeting any emergency. This fund is built out of the profits from year to year.

A.K. Basu

RESERVE RATIO OF THE BANK (*Monetary economics)

The ratio of cash on hand to deposits expressed as a percentage.

A.L. Meyers

RESIDUAL CLAIMENT THEORY OF WAGES (*Theory of value)

Advanced by F.A. Walker, an American economist, the theory states that wages are the residue left over after other factors of production are paid. Walker wrote: "The wages of a working man are ultimately considered with what he produces after the deduction of rent, taxes, and the interest on capital."

Compiler

RESIDUAL THEORY OF PROFITS (*Theory of value)

It is perhaps the first theory of profits. It states that profits are the residue when all necessary payments have been made from the income of the business.

Briggs and Jordan

RESIDUARY MONOPOLY OF NOTE-ISSUE (*Monetary economics)

It denotes a case where there are a number of note issuers but all of these except one are working under narrow limitations and this one authority is responsible for the bulk of circulation.

Vera Smith

The phrase "residuary monopoly of note-issue" was coined by Vera Smith.

Compiler

RESOURCE CONSERVATION (*Economics of development)

"Wise and economic" use of resources.

H.F. Williamson

RESOURCE INPUTS (*Theory of value)

Factors of production.

Compiler

RESTRAINING POLICY (*Monetary economics)

Disinflationary policy.

R.S. Sayers

RESTRICTION (*International economics)

A method of exchange control. It is a policy in which the government compulsorily reduces the supply of its currency coming into the market. Certain persons or categories of persons who would otherwise have offered the currency in exchange for foreign currencies are forbidden to do so.

There are three earmarks of restriction: (i) all trading in foreign exchange is centralised in the government and its immediate agents, (ii) permission is required from the Government before the national currency can be offered in exchange for any other, and (iii) it is made a criminal offence for anyone to enter into an exchange transaction except by the permission and through the agency of the Government.

G.Crowther

RETAIL PRICE (*Theory of value)

Price charged when a product is sold to a consumer whether the latter be an individual or a group.

Bettelheim

RETAIL VALUE OF MONEY (*Monetary economics)

The value of money to a family that happens to buy exactly those things which it has been established by enquiry that the average family does buy.

G. Crowther

REVALUATION (*International economics)

Overvaluation of currency. Opposite of devaluation.

Compiler

REVEALED PREFERENCE ANALYSIS (*Theory of value)

There are three main approaches to the demand theory: (i) utility analysis, (ii) indifference curve analysis, and (iii) revealed preference analysis.

The revealed preference theory which Prof. Tapas Majumdar characterises as "behaviourist ordinalist" was put forward by Dr. P.A. Samuelson of the M.I.T. in 1938, while the first two approaches have been propounded mainly by Dr. Alfred Marshall and Dr. J.R. Hicks respectively.

According to this hypothesis, when a consumer chooses a combination A it means that he considers all other alternative combinations inferior to A. Here "choice reveals preference."

Samuelson's revealed preference hypothesis is an improvement over Marshallian and Hicks-Allen psychological explanation of demand theorem.

Compiler

REVENUE RECEIPTS (*Public finance)

Receipts which increase the usable funds of the treasury without increasing its debt obligations; or which reduce its debt obligations without reducing its usable funds.

P.E. Taylor

RICARDIAN THEORY OF VALUE (*Theory of value)

Labour theory of value. In 1817 Ricardo said that commodities exchange against one another according to the relative quantities of labour embodied in them.

Frederic Benham

RICARDO, DAVID (1772-1823) (*History of economic thought)

Three people built up the Classical political economy. Ricardo is one of them (the other two are Adam Smith and T.R. Malthus). Mrs. Joan Robinson considers Ricardo as the greatest of all economists. Mark Blaug writes, "As a rigorous theorist, Ricardo is obviously Adam Smith's superior......if economics is essentially an engine of analysis, a method of thinking rather than a body of substantive results, Ricardo literally invented the technique of economists."

David Ricardo who came to economics in 1799 by fluke inspired by Smith's *Wealth of Nations* was born in London in 1722 in a Jewish family. At 12 he went to Holland to study commerce. At 14, he returned and became a stockbroker. At 21 he married a christian lady named Priscilla Ann Wilkinson. Father got wild for his having married a christian and asked him to get out. Young Ricardo got out pennyless. Five years later he became fabulously rich by amassing £2 million. After attaining financial stability, he took up to intellectual pursuits in economics.

When 48, Ricardo lost the hearing sensation of one ear and was daily losing his teeth. On September 11, 1823, Ricardo suddenly died of ear inflammation when he was only 51 years old.

Ricardo started writing at the persuasion of James Mill. He wrote so superbly that he became immortal. Ricardo's works are:

(1) *The High Prices of Bullion-A Proof of the Depreciation of Bank Notes* (1810),
(2) *Reply to Mr. Bosanquet's Practical Observations* (1911),

(3) *Essay on the Influence of a Low Price of Corn on the Profits of Stock* (1815),
(4) *Proposals for An Economical and Secure Currency* (1816),
(5) *The Principles of Political Economy and Taxation* (1817),
(6) *On Protection to Agriculture* (182 '),
(7) *A Plan for the Establishment of a National Bank* (1824), and
(8) *Notes on Malthus's Principles of Political Economy* (1824).

Among these, *The Principles of Political Economy and Taxation* is the masterpiece. It is "most difficult to read and grasp of all the great treatises of economics".

Ricardo defined Smith's use-value as utility—the capacity of a product to contribute to our gratification. To him it was not the measure of exchange value although it was absolutely essential for it. He propunded the celebrated labour theory of value according to which labour is the only source of value and relative prices are determined by the relative amounts of labour required to produce commodities.

In Ricardian economics, distribution is the heart. Ricardo wrote : "To determine the laws which regulate this distribution is the principal problem in political economy."

In distribution again, rent occupies the central place, Ricardo avers. He defined rent as "that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil". He enunciated the immortal theory of rent according to which rent —the payment for the use of land only—emerges due to scarcity and heterogeneity of land.

Ricardo, who is nicknamed "the respectable professor of dismal science" put forward the subsistence theory of wages. He stated it thus: "Labour, like all other things which are purchased and sold, and which may be increased or diminished in quantity has its natural and its market price. The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution."

Ricardo defined capital as "that part of the wealth of the country which is employed in production; and consists of food, clothing, tools, raw materials, machinery etc., necessary to give effect to labour." He advanced the theorem that "profits depend on high or law wages." He maintained: "The natural tendency of profits is to fall; for, in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour."

Ricardo, a free trader, advanced the celebrated comparative cost theory of international trade according to which each country specialises in the production and exportation of these commodities wherein the cost of production is relatively low, and imports those goods wherein the cost of production is relatively high.

David Ricardo defined taxes as a portion of the produce of the land and labour of a country placed at the disposal of the government and recommended that the taxes should be so imposed as to press on all equally, so as to interfere as little as possible with the natural equilibrium that would have prevailed if no disturbance whatever had been given.

He was a capitalist, and yet he proposed capital levy. He defended taxation as opposed to borrowing as a method of financing war. He opposed the use of machinery. Originally he had favoured machinery.

Ricardo a metallist argued, "to say that commodites are raised in price is the same thing as to say that money is lowered in relative value—when gold is cheap, commodities are dear; and when the gold is dear, commodities are cheap." He held that over-issue of currency notes was the cause of inflation. He attacked the monetary policy of the Bank of England and asked for its nationalisation. He suggested 100 per cent gold reserves against issue of currency notes.

Ricardo holds the distinction of being the master brain behind deductive economics. He is the inventor of what Hayek calls Ricardo effect which states that "a rise in real wages will lengthen the average period of production in an economy."

Ricardo prophetically maintained: "Economic growth must sooner or later peter out owing to scarcity of natural resources."

David Ricardo was a pragmatic economist.

Compiler

RICARDO EFFECT (*Theory of value)

Phrase coined by F.A. Von Hayek. It takes its name from Ricardo's argument that a general rise in money wages leads to a substitution of machinery for labour. It states that a rise in real wages will lengthen the average period of production in an economy.

Mark Blaug

RICARDO'S THEORY OF RENT (*Theory of value)

Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil. It is often, however, confounded with the interest and profit of capital and in popular language, the term is applied to whatever is annually paid by a farmer to his landlord.

David Ricardo

RICH COUNTRY (*Economics of development)

High-income country. It is also called affluent or developed country.

Compiler

RIG THE MARKET (*Theory of value)

To influence market conditions.

Briggs and Jordan

RIGID VERSION OF QUANTITY THEORY OF MONEY (*Monetary economics)

It states that prices always change in exact proportion to changes in the quantity of money.

A.W. Stonier and D.C. Hague

RIKSBANK OF SWEDEN (*Monetary economics)

Central Bank of Sweden. It sprang from a privately owned bank; was founded in 1656 and was reorganised as a state bank in 1668 and followed in the footsteps of the Bank of England and gradually developed into a central bank. Of the existing central banks it is the oldest in the sense that it was the first to be established. but the Bank of England was the first bank of issue to assume the position of a central bank.

M.H. deKock

This bank instituted Economics Nobel prize in 1969.

Compiler

RISK (*Theory of value)

The chance that the enterprise may prove unprofitable and that the capital devoted to it may be lost and the human effort wasted.

Fairchild, Buck and Slesinger

RISK BEARING THEORY OF PROFITS (*Theory of value)

The theory was advanced by F.B. Hawley of America. According to it, profit is the reward for risks and responsibilities to which the entrepreneur subjects himself.

Compiler

RISK PREMIUM (*Monetary economics)

That part of an interest charge estimated to cover the possibility of the loan being defaulted in whole or in part.

ROADS (*Economics of transport)

Roads are classified on the bases of (a) suitability to mechanical transport, (b) suitability to weather, and (c) method of construction into (i) motorable and non-motorable roads, (ii) fair weather and all-weather roads and earth or kucha roads, respectively.

The conference of provincial chief engineers convened by the Government of India at Nagpur in December 1943, classified the Indian roads into (i) national highways (ii) provincial (now state) high ways, (iii) district major or minor roads, and (iv) village roads.

Compiler

ROBBINS, LIONEL (b. 1898) (*History of economic thought)

Lionel Robbins, later Lord Robbins, of the London School of Economics is one of the brigthest stars of economic firmament. The uniqueness of this internationally reputed economist lies in the fact that unlike many economists who dangle in the celestial air of crudition which is unintelligible and inaccessible to the masses, Robbins is familiar to all down from toddlers in economics up to professional economic stalwarts. Since 1932, economic science is understood and written in the framework of Robbinsian definition of economics.

Born on 22nd November 1898, of Rowland Richard Robbins and Rosa Marion Robbins, at Sipson farm, Sipson, Middlesex, Robbins joined a preparatory school at the age of eight. He was 11 when his mother died of cancer. But he was already past 60 years when his father expired. After passing Matriculation examination, he joined the university college, London. He studied at the London School of Economics under illustrious economists such as Hugh Dalton, Edwin Cannan and Ludwig Von Mises and passed B.Sc. (Econ.) in 1923.

Robbins began his career as a worker in the Labour movement. For some time he served in the New College. Dalton got him Lecturership in the LSE where he became professor in 1929 and served in that capacity for over 30 years. During the second world war, he served as Director of the Economic Section of the war cabinet. As a member of the British team at the Bretton Woods Conference (1944), he did commendable job with Lord Keynes. In 1959, he became a life peer (Baron Robbins of Clare Market). Later he became the Chairman of Higher Secondary Education Commission.

Lord Robbins is a versatile economist with mastery in methodology, public policy, welfare economics, economic development and economic thought. Besides, he is a great educationist.

Robbins, a prolific writer has published:

(1) *An Essay on the Nature and Significance of Economic Science* (1932),
(2) *The Great Depression* (1934),
(3) *The Economic Basis of Class Conflict and Other Essays in Political Economy*,
(4) *Economic Planning and International Order* (1937),
(5) *The Economic Problem in Peace and War* (1950),
(6) *The Theory of Economic Policy in English Classical Political Economy*,
(7) *The Economist in the Twentieth Century* (1954),
(8) *Robert Torrens and Evolution of Classical Economics* (1951),
(9) *Polities and Economics*,

(10) *The University in the Modern World*,

(11) *The Economic Causes of War*,

(12) *The Theory of Economic Development in the History of Economic Thought*,

(13) *The Evolution of Modern Economic Theory*,

(14) *Autobiography of An Economist* (1971).

Among these his *Essay* is one of the world's classics. In 1932, he replaced Marshall's welfare definition of Economics by putting forward his own revolutionary scarcity definition according to which "economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses." This definition for the first time brought about a clear distinction between economic activity and non-economic activity.

To Robbins economics is a deductive science. By holding that economics is a positive science as opposed to normative science, Robbins argued that economics was neutral between ends. His definition also distinguished between economics and technology which were till 1932 confused to be the same. He ruled out inter-personal comparison of utility. He said that an economist was just a teacher and not a preacher.

Robbins showed that the labour supply curve might be backward bending, positively sloped over a range and then becoming negatively sloped.

Robbins is among the founders of the new welfare economics. He wrote, "planned economy is quite conceivable in theory but could not be put in practice". Robbins is a liberalist.

Compiler

ROBERTSON, DENNIS HOLME (1890-1963) (*History of economic thought)

A great English economist. At one time it was 'feared' that he would overtake Lord Keynes in greatness as an economist. His greatness lies in his originality of thinking, subtle wit, serious humour, uncanny insight into the subject, profound erudition and charming style of writing. Though an all rounder, professor Robertson was a specialist in monetary economics, trade cycles and price theory.

Born in 1890, D.H. Robertson served as Reader in Economics at Cambridge University, England, from 1930 to 1938 when he was appointed to Sir Ernest Cassel chair at the London School of Economics. In 1914, he started his career as a Fellow at the Trinity College, Cambridge. In 1939 he was made professor of Economics at London University. He held the post until 1944 and succeded A.C. Pigou to the chair of Political Economy at Cambridge University. During the World War II, Professor Robertson was Adviser to the Treasury. After retirement he became Emeritus Professor,

He wrote extensively exerting tremendous influence on policy making of the Governments. His important publications are:

(i) *A Study of Industrial Fluctuations* (1915),
(ii) *Money* (1922),
(iii) *The Ebb and Flow of Unemployment* (1923),
(iv) *The Control of Industry* (1923),
(v) *Banking Policy and Price Level* (1926),
(vi) *Economic Fragments: Essays and Addresses* (1931),
(vii) *Essays in Monetary Theory* (1940),
(viii) *Utility and All That* (1952),
(ix) *Britain in the World Economy* (1954),
(x) *Economic Commentaries* (1956),
(xi) *Lectures on Economic Principles* (1957-59) in three volumes.

Apart from the above, he wrote several brilliant articles.

Sir Robertson, a staunch Marshallian was a very important member of Cambride School of Economics. He wielded considerable influence on the writings of Lord Keynes. Along with R.G. Hawtrey, Joan Robinson and Roy Harrod, Robertson was consulted by Keynes at every step while writing *The General Theory.*

In 1957, Robertson was appointed as a Member of the Council on Prices, Productivity and Incomes. The job of the Council was to study the problem of inflation and its relation to average productivity and to keep under review the development of the economy.

In his *Money* Robertson gave a widely accepted definition of money as follows: "Anything which is widely accepted in payment for goods, or in discharge of other kinds of business obligation."

He showed the significance of money in the following words:

"The existence of monetary economy helps society to discover what people want and how much they want it and so to decide what shall be produced and in what quantities and to make best use of its limited productive power. And it helps each member of society to ensure that the means of enjoyment to which he has access yield him the greatest amount of actual enjoyment which is within his reach—it gives him the chance of not surfeiting himself with bus rides, or stinting himself unduely of the countenance of Charlie Chaplin." However,he warned that "money which is a source of so many blessings to mankind, becomes also, unless we control it, a source of peril and confusion."

Robertson a great theorist, defined the value of money as "The amount of things in general which will be given in exchange for a unit of money." He observed, "money is only one of many economic things. Its value, therefore, is primarily determined by exactly the same two factors as determine the value of any other thing, namely, the conditions of demand for it and the quantity of it available."

Robertson stated Fisherian quantity theory of money thus: "Given the condition of demand, for money, the relation between its value and the quantity of it available is of this peculiar kind: the larger the number of units available, the smaller, in exactly the same proportion, is the value of each unit."

Sir D.H. Robertson—one of the chief architects of famous Cambridge or cash balance version of quantity theory of money epitomised the cash balance approach in the following celebrated and oft-quoted equation; M=PKT where M represents the quantity of money; P signifies the price level: T stands for volume of goods bought during the year; K denotes demand for money.

Robertson defined gold standard as a state of affairs in which a country keeps the value of its monetary units and the value of defined weight of gold at an equality with one another. Criticising gold standard, Robertson, remarked, "The value of the yellow metal, originally chosen as money because it tickled the fancy of savages, is clearly a chancy and irrelevant thing on which to base the value of our money and the stablility of our industrial system."

Inter-alia Robertson developed non-monetary over investment theory of trade cycles. He distinguished between *ex-ante* and *ex-post* saving and investment. *Ex-ante* saving signified the difference between consumption of the current period and income of the preceding period while *ex-ante* investment denotes the difference between the current income and consumption.

D.H. Robertson is one of the exponents of loanable fund theory of interest according to which the rate of interest is determined by the demand for and supply of loanable funds. He called 'forced saving' 'imposed lacking'. He gave the concept of 'day' which implies a period too short to dispose of earned income.

J.A. Schumpeter observed, "Keynes concentrated on monetary aspects and monetary policy from the first, whereas Robertson emphasised real factors—as against both monetary and psychological ones from the first."

Robertson corrected Keynes and Keynes corrected Robertson and thus its difficult to know how much of Keynesian economics is Robertsonian and how much of Robertsonian economics is Keynesian.

It is 1963 when Sir Robertson, a bachelor to the last and the man who made the arid science of economics an enchanting discipline by profusely quoting from *Alice's Adventures in Wonderland* of Lewis Carroll and by injecting scientillating humour, breathed his last.

Compiler

ROBINSON CRUSOE ECONOMIST (*Theory of value)

Certain of the earlier economists were found of attempting to distinguish between value in use and value in exchange. In doing this,

they drew so frequently upon the experiences of Robinson Crusoe that the term "Robinson Crusoe economists" sprang up as a term of derision for them.

A.L. Meyers

ROBINSON CRUSOE ECONOMY (*Theory of value)

Economy of an isolated individual.

Ragnar Nurkse

ROBINSON, EDWARD AUSTIN G. (*History of economic thought)

A famous 20th century British economist and the husband of Mrs. Joan Robinson—one of the most brilliant of the contemporary economists.

Austin Robinson, F.B.A., and C.M.G. was Professor of Economics in Cambridge University; a pupil and subsequently a colleague of Lord Keynes, and assistant editor to Keynes (1935-45). In 1945 he succeeded Lord Keynes as the Secretary of the Royal Economic Society.

Robinson's brilliant works are:

(1) *The Structure of Competitive Industry* (1932),
(2) *Monopoly* (1941).

In 1974 along with Keith Griffin, he edited *Economic Development of Bangladesh.*

EAG Robinson's biographical sketch of Lord Keynes and treatment of optimum firm are classic.

It is interesting that Austin Robinson was appointed a tutor to the Maharaja of Gwalior (India) during 1926-28.

Compiler

ROBINSON, JOAN VIOLET (1903-1983) (*History of economic thought)

One of the greatest economists of the 20th century. She belonged to England.

Born on October, 31 1903, Robinson studied in St. Paul's Girls' High School, London and Gritton College, Cambridge. In *1926*, she married Prof. A.E.G. Robinson, a noted Cambridge economist. The Robinsons have two daughters.

Mrs. Robinson started her career as Assistant Lecturer in Economics at Cambridge University in 1931. She was Lecturer between 1937 and 1949. She served as Reader from 1949 to October 1965. On her husband's retirement in 1965 she was elected to the chair of Economics. She retired as Professor of Economics at Cambridge University in 1973. During the spring of 1969, Mrs. Joan Robinson was special professor at Stanford University. She died on August 5, 1983 at London after prolonged illness and coma for many days.

Paying tribute to Joan Robinson, Nobel Laureate P.A. Samuelson wrote, "Economics owes much to Joan Robinson for her many contributions across the whole spectrum of the subject: imperfect competition, Keynesian macroeconomics, international trade, Marxian analysis contributions and critiques, growth theory, economic philosophy and much more." Mrs. Robinson who burst into global limelight in 1933 at the young age of 30 years was a vitriolic critic of neo-classicism, a great admirer of Karl Marx and a follower of David Ricardo whom she considered the greatest of all economists. She was a powerful member of what Samuelson calls "Anglo-Italian School" or "Italo-Cantabridgian School".

Robinson was first influenced by Alfred Marshall and later by Lord Keynes, but finally she became a Marxian economist. She wrote, "if there is any hope of progress in economics at all, it must be in using academic methods to solve the problems posed by Marx."

Professor Mrs. Joan Robinson's greatest contribution to the science of economic science is the theory of imperfect competition. Taking a cue from professor Pierre Sraffa's revolutionary 1926 article "Laws of Returns under Competitive Conditions", Robinson at one stroke replaced in 1933 Marshallian economics by propounding the theory of imperfect competition, She treated the price theory in terms of monopoly in contrast to Marshall's competitive analysis.

Robinson used the significant terms such as marginal cost, marginal revenue and monopsony.

Robinson was a very fertile writer. Her significant publications include:

(1) *Economics of Imperfect Competition* (1933),
(2) *Essays in the Theory of Employment* (1937),
(3) *Introduction to the Theory of Employment* (1937),
(4) *Essays on Marxian Economics* (1942),
(5) *Collected Economic Papers—Vols. I to IV* (1951-73),
(6) *The Rate of Interest and Other Essays* (1952),
(7) *The Accumulation of Capital* (1956),
(8) *Essays in the Theory of Economic Growth* (1962),
(9) *Economic Philosophy* (1963),
(10) *Economics: An Awkward Corner* (1966),
(11) *The Cultural Revolution in China* (1969),
(12) *Freedom and Necessity* (1970),
(13) *Economic Heresies* (1971),
(14) *Introduction to Modern Economics* (*with John Eatwell*) (1973).

Besides, she wrote numerous articles and papers in learned journals.

Of the above books, *Economics of Imperfect Competition* a contribution of the theory of value and distribution– made her instantly famous. *The Accumulation of Capital* which is Joan Robinson's *magnum opus* is a major contribution to the theory of economic growth. In her small but seminal work *Economic Philosophy* she wrote: "The first essential for economists. . . . .is to combat, not foster, the ideology which pretend that the values which can be measured in terms of money are the only ones that ought to count." In this book she convinced that economic values and money values were not identical.

Mrs. Robinson was a leftist thinker, but she was first an academician par excellence. She once said, "Social life is impossible unless the pursuit of self-interest is mitigated by respect and compassion for others."

Mrs. Robinson who spent two years in India (1926-28) along with her husband Austin Robinson, was deeply interested in this country. She asked the Indians to do more than what we had achieved. She affirmed that population problem must be solved for a rapid and equitable growth. She warned, " . . . . The massive unemployment and under-employment that afflicts the world today shows a defect in social and economic institutions."

The philosophy of Joan Robinson who was an original economic thinker of the stature of Lord Keynes, was "Any economic system requires a set of rules, an ideology to justify them, and a conscience in the individual which makes him strive to carry them out."

Compiler

ROLLING PLAN (*Economics of planning)

A type of planning. It involves the rolling of a plan at intervals, usually one year, so that it continues to be a plan of certain number of years. To illustrate, take an example of five year plan for say, 1980-85. After the first year, i.e 1980 is over, another year i.e. 1986 is added, so that it becomes a five year plan for 1981-86. In 1982, one year namely 1981, gets dropped and 1987 added. As a result in 1982 there is again a five-year plan of 1982-87. And so on and so forth.

A. N. Agrawal

The concept of Rolling plan is a contribution of Nobel Laureate Dr. Gunnar Myrdal of Sweden. He advocated it for the less developed countries in his *Indian Economic Planning*. In its broader setting, according to Myrdal, in the rolling plan every year three plans are made. First there is a plan for the current year which includes the annual budget and foreign exchange budget. Second, there is a plan for a number of years, say three or four or five. It is revised every year in keeping with the requirements of the economy. It contains techniques and targets to be followed during the plan period along with price relationships and price policies. Third, there is a prespective plan for 10 or 15 or 20 years or even more. The

prospective plan is presented every year in which broader goals are stated and the outlines of future development are forecast.

The National Planning Commission of India decided on September 10, 1977 to introduce Rolling Plan with effect from April 1, 1978. The first Rolling Plan covering the period of 5 years started accordingly on April 1, 1978 with the termination of the fifth Five Year Plan (1974-79) one year in advance on March 31, 1978. However with the change in the government in 1979, the rolling plan was dropped and the Sixth Plan (1980-85) started.

Compiler

Planning is a continuous process. At intervals, most conventionally perhaps every year, the whole problem should be reconsidered in great perspective taking account of new information, improved data and improved analyses. At each round, certain commitments will have been made that cannot be changed. While others are such that they may be modified in the light of the new information and analyses. A technique for such periodic revision should be worked out and incorporated as an essential part of the planning machinery. At each revision it will be well to look into the future a number of years which is determined by the nature of the factual circumstances. If five years is deemed to be a suitable horizon, the number of years may be applied at each of the yearly revision in a sense one would always be working in the beginning of a five year period.

Ragnar Frisch

ROSCHER, WILHELM (1817-96) (*History of economic thought)

Founder and leader of German Historical School. His *Outline of Lectures on Political Economy According to the Historical Method* (1843) is considered to be the originator the Historical school.

Compiler

ROSENSTEIN-RODAN, PAUL N. (*History of economic thought)

An internationally renowned contemporary economist of the Massachusetts Institute of Technology (U.S.A). He has put forward the celebrated "Big-push" theory of economic development. The thesis argues that a big push or a large comprehensive programme is needed in the form of a high minimum amount of investment to overcome the obstacles to development in underdeveloped countries. Professor P.N. Rosenstein-Rodan is also one of the proponents of the doctrine of balanced growth, the others being Ragnar Nurkse and Arthur Lewis.

Compiler

ROSTOW, WALT WHITMAN (b. 1916) (*History of economic thought)

A distinguished American economist. Born on Oct 7, 1916 in New ork city, Rostow received his B.A. degree from Yale University in 1936

and Ph.D. from the same university in 1940. During 1936-38, he attended Balliol College of Oxford as a Rhodes scholar. He began his career as an educator in 1940 when he became an instructor of economics at Columbia. During the second World War he served as Major in the O.S.S. After the war, Major Rostow joined the State Department as Assistant Chief of the German-Austrian Economic Division. In 1946 he returend to teaching as the Harmsworth Professor of Amcrican Hisotry in Oxford University and remained there till 1947 when he became the Assistant to Executive Secretary of the Economic Commission for Europe. He returend to England in 1949. From 1950 to 1961, Rostow was professor of economic history at Massachusetts Institute of Technology. He was also a staff member of Centre for International Studies during 1951-61.

In January 1961, the President of America Mr. F. Kennedy appointed Rostow as Deputy Special Assistant to the President for National security Affairs till December 1961 when he was appointed counsellor of the Department of State and Chairman of Policy Planning Council, Department of State. In 1964, the President appointed him to the additional duty of the U.S. Member of the Inter-American Committee on the Alliance for Progress (CIAP) (with the rank of Ambassador). He served in these two later capacities until early 1966 when President Johnson called him back to the White House as his Speeial Assistant for National Security Affairs. He remained there until January 20, 1969.

In February 1969, Rostow returned to teaching at the University of Taxas at Austin as Professor of economics and history.

Prof. Rostow received the Order of the British Empire (honorary military division (1945), the Legion of Merit (1945), and the Presidential Medal of Freedom (with Distinction) (1969).

Mr. Rostow is married to the former Elsepeth Vaughan Davies. The Rostows have two children: Peter and Ann.

Contribution

Prof. Rostow, a leading economist, historian, diplomant and political scientist has published about 20 books. His masterpieces are: *The Process of Economic Growth* (1952) and *The Stages of Economic Growth: A Non-communist Manifesto* (1960). These two books have shed much light and emanated much heat too.

Prof. Rostow's other books include:

(1) *The American Diplomatic Revolution* (1947),

(2) *Essays on the British Economy of the Nineteenth Century* (1948),

(3) *The Growth and Fluctuation of the British Economy*, 1790-1850 with A.D. Gayer and A.J. Schwartz (1953),

(4) *The Dynamics of Soviet Society* (with *A. Levin and others*) (1952, 1967),
(5) *The Prospects for Communist China* (1954),
(6) *An American Policy in Asia,* (with *R.W. Hatch*) (1955),
(7) *A Proposal: Key to An Effective Foreign Policy* (with M.F. Mallikan,) (1957),
(8) *The United States in the World Arena* (1960),
(9) *The Economics of Take-off into Self Sustained Growth* (Ed.) (1963),
(10) *View from the Seventh Floor,* (1964),
(11) *A Design for Asian Development,* (1965),
(12) *Past-West Relations: Is Detente Possible?* (with *W.E. Griffith*) (1969),
(13) *Politics and the Stages of Growth,* (1971),
(14) *The Diffusion of Power* (1972),
(15) *How It All Began* (1975).

In *The Stages of Economic Growth* which produced a lot of controversy everywhere including the U.S.A., Rostow developed five stages of growth, viz., (i) the traditional society, (ii) the pre-conditions for take-off, (iii) the take-off, (iv) the drive to maturity, and (v) the age of high mass consumption. Of these the most controversial and yet the most illuminating stage is that of the take-off, the obvious analogy being with an aeroplane which can fly only after attaining a critical speed.

Rostow defines the traditional society as "one whose structure is developed within limited production functions based on pre-Newtonian science and technology and as pre-Newtonian attitudes towards the physical world."

The pre-conditions for take off—the second stage represents a traditional era in which the pre-conditions for sustained growth are created.

"The take-off stage is", Prof. Rostow defines, "an industrial revolution, tied directly to radical changes in the methods of production, having their decisive consequence over a relatively short period of time." The take-off is a stage in the life of a society "when growth becomes its normal condition......forces of modernisation contend against the habits and institutions. The value and interests of the traditional society make a decisive breakthrough and compound interest gets built into society's structure."

According to Rostow, there are three related and necessary conditions for the take off :

"(i) A rise in the rate of productive investment from Say, 5 per cent or less to over 10 per cent of national income or net national product;

(ii) the development of one or more substantial manufacturing sectors with a high rate of growth; and

(iii) "the existence of quick emergence of a political, social and institutional framework which exploits the impulses to expansion in the modern sectors and gives to growth an outgoing character."

Rostow, an economic historian par excellence, predicts that pressure of population, energy crisis and price rise will persist. He asserts that Keynsian framework for public policy no longer suffices and hence we must go for new technologies. He holds that it is the moral duty of the rich nations to help the poor countries.

During his recent visit to India, Prof. Rostow said that the world economy was passing through Fourth Industrial Revolution which started at the beginning of the eighties.

Compiler

ROUND-ABOUT METHOD OF PRODUCTION (*Theory of value)

Capitalist method of production—the method which involves the use of more capital.

Frederic Benham

Indirect method of production, in which a greater amount of capital, intermediate goods such as machinery, raw materials and half finished products is used per unit of output of consumable goods.

Gottfried Von Haberler

Production of goods in a series of specialised stages based on a division of labour.

Briggs and Jordan

ROWAN SYSTEM OF BONUS (*Economics of labour)

A type of premium bonus system. It is so called because David Rowan of Glasgow first introduced it. In this each unit of work has a standard time assigned to it.

J.L. Hanson

RUDRA, ASHOK (*History of economic thought)

A leading Indian economist. His important book is *Indian Plan Models* (1975).

Compiler

RULING PRICE (*Theory of value)

Actual or market price.

W.J. Fellner

RUN ON THE BANK (*Monetary economics)

A development in which a large proportion of depositors demand repayment when bank failure is feared.

Frederic Benham

When depositors begin to draw out their funds in currency in large numbers, there is said to be a 'run' on the bank.

Raymond Bye

RUNAWAY INFLATION (*Monetary economics)

Hyper or galloping inflation.

Compiler

RUNNING-BROKERS (*Monetary economics)

The small firms which do a little business of the same dealing kind as that of the discount houses and also act as agents for some of the outside banks and other customers.

R.S. Sayers

RYOTWARI SYSTEM (*Agricultural economics)

A system of land tenure prevailing in India. Ryot means cultivator. Under this system every registered holder of land is virtually its proprietor, and cannot be ejected as long as he pays revenue direct to the government.

Alak Ghosh

There is an INDEX OF AUTHORS and also a SUBJECT INDEX at the end of the last volume Five.